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Issues in Applied Linguistics

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Issues in Applied Linguistics

This issue
is dedicated to the memory of

John   Povey

April 5, 1929 - May 3, 1992

Professor   Emeritus
Department of TESL & Applied Linguistics
UCLA

His humor and support will be greatly missed.
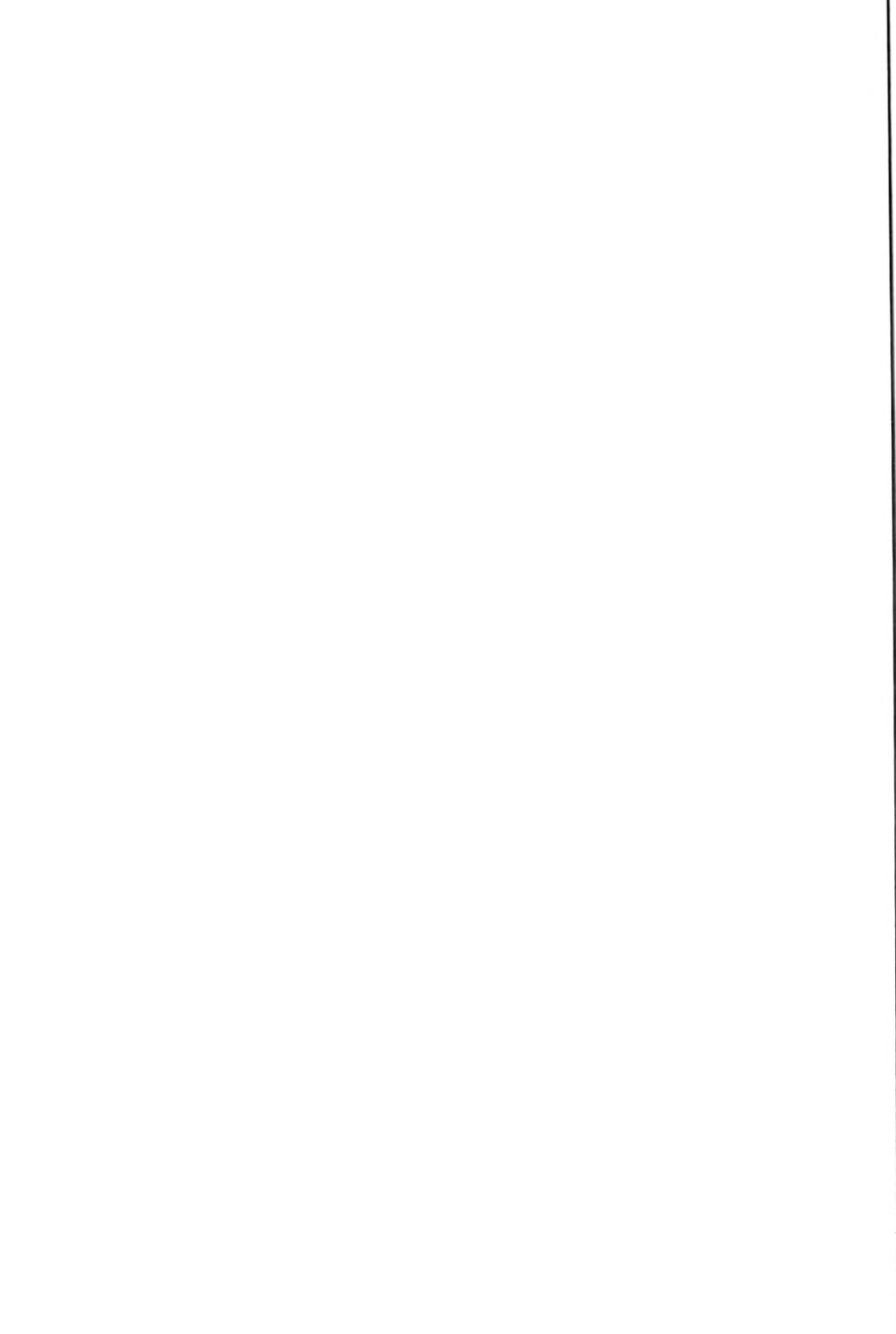
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... in the making of constructs relevant to a theory of second language learning, one would be completely justified in hypothesizing, perhaps even *compelled* to hypothesize, the existence of a separate linguistic system based on the observable output which results from a learner's attempted production of a TL norm. This linguistic system we will call "interlanguage" (IL).

Larry Selinker (1972)
"Interlanguage"

It is now a good twenty years since the concept of interlanguage became a part of the everyday vocabulary of second language acquisition research. Indeed, the notion had a profound effect on applied linguists' understanding of what it means to learn an additional language, because it recast the nonnative speaker as an intelligent human being struggling to identify and create a systematic representation of a new language and led to the abandonment of the view which had cast the nonnative speaker as a rather dunce-like producer of error and deviant utterances, despite instruction, exposure, and practice. The concept of interlanguage also contributed to explanations for why most learners of languages failed to achieve target language proficiency and why a good deal of pedagogy was inhibiting rather than facilitating learners' development of a coherently organized approximation of the target language. Ultimately, the recognition that systematicity could be found at any second language proficiency level, no matter how basic, moved second language acquisition research closer to research being done on first language psycholinguistics and pidgins and creoles, as well as in cognitive science, and opened the way for contrastive analysis and error analysis to reinvent themselves as interlanguage research.

The rise of interlanguage research at once supported and challenged the by-then reigning Chomskyan paradigm. On the one hand, interlanguage research was discovering the rule-making processes of many different kinds of language learners trying to learn a range of languages under various natural, classroom, and quasi-experimental conditions, and thus the growing body of findings could be brought to bear on theoretical work concerned with Universal Grammar. But since the focus of interlanguage research was on the "performance errors" of actual learners, it also called into question, to a certain extent, the theoretical enterprise of trying to construct the intuitive rule-governed linguistic competence of ideal speakers from invented sentences and native-speaker grammaticality judgments and the theoretical school's declared disinterest in matters pertaining to actual language use.

In language teaching pedagogy, interlanguage research also forced teachers and testers to reassess their attitude to "mistakes," "errors," and "wrong answers" as symptoms of cognitive deficit or evidence of insufficient drill and practice. Instead, interlanguage research made it possible for language educators to treat error as an opportunity to diagnose their students' confusions about the target language and thus to tailor their pedagogy so as to facilitate the clearing up of those confusions. In other words, language pedagogy began to orient itself both to the order that could be gleaned from the disorder of nonnative language output and to the importance of individualization in second language learning.

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King Henry:	An angel is like you, Kate, and you are like an angel.
Katherine:	Que dit-il? Que je suis semblable à les anges?
	. . .
	O bon Dieu! les langues des hommes sont pleines de tromperies.
King Henry:	What says she fair one? That the tongues of men are full of deceits?
Alice:	Oui, dat de tongues of de mans is be full of deceits: dat is de Princess.

William Shakespeare
Henry V, V:ii:110-123

The bulk of interlanguage research has focused on morphology, syntax, and phonology, but the growing interest in recent decades in the personal, social, and political consequences of languages and cultures being in contact has led to the beginning of an expansion of interlanguage concerns to encompass questions of semantics, pragmatics, discourse, rhetoric, and literacy. In this first issue of the third volume of *Issues in Applied Linguistics,* three of the main articles concern themselves with some of these broader aspects of interlanguage.

The first article, by Arlene Clachar, reports on a pioneering study comparing the interlanguage proficiency levels of immigrant ESL students with results on a social-psychological questionnaire designed to measure a person's locus of control. The study explores the relationship between language proficiency and a person's sense of responsibility for and control over his or her own destiny when faced with socio-economic hardship, discrimination, and frustrations in self-expression. Clachar demonstrates the complexity of the locus of control construct and finds that one of its subscales, the locus of personal control, correlates significantly with interlanguage development. Her study makes a contribution to research concerned with the connections between motivational and affective factors and language proficiency.

The second main article in this issue, by Laurie Ann Haynes, investigates the target language variability between speaking and writing modes in the interlanguage development of nonnative speakers of English. Using the multi-feature/multi-dimensional approach developed by Doug Biber, Haynes tracks eleven linguistic features, representing three dimensions of the oral/literate continuum, in the spoken and written narratives of nonnative speakers, and compares those findings with the spoken and written narratives of native speakers. Haynes finds that the nonnative speakers' variability develops systematically toward native-speaker variability across the proficiency levels for both modes of elicited narrative. Her study contributes to research on interlanguage variability both in speaking and writing and within a particular genre and shows how well documented large-scale methodologies can be adapted for smaller-scale research projects.

Interlanguage variability is also the subject of the third article in this issue, by S. B. Makoni. Makoni's study focuses on how linguistic environment and discourse location can affect the morphosyntactic and lexical variability of the unplanned performance of learners of English at different stages of interlanguage development. Comparing narrative data elicited

from two levels of nonnative speakers, Makoni finds that variability increases with proficiency and varies more in particular linguistic environments and that, contrary to expectation, intermediate-level learners are more likely to inflect verbs with third-person -*s* if the grammatical subject is realized. Makoni's study makes a contribution to interlanguage research concerned with context-sensitive variability and with speakers of African languages.

Related to interlanguage and second language acquisition is the fourth article in this issue, by Yasuhiro Shirai, who advocates adopting a connectionist approach to answer questions about first language (L1) transfer. Shirai discusses in detail six conditions on L1 transfer, evaluates how they have been traditionally explained in the symbolic approaches to SLA, and offers a reexamination of these conditions from within a connectionist framework, basing much of his discussion on the recent work of Mike Gasser. Shirai's essay makes an interesting contribution to the question of which cognitive model can best facilitate an understanding of language processing, and he suggests several directions that future SLA research might pursue within the connectionist approach.

Our fifth main article is a short report from a reference librarian, Elaine Wagner, who set about trying to locate relevant and recent bibliography on older adult language learners, using a number of comprehensive reference databases. Wagner points out that the dominance of the critical-period hypothesis for language acquisition and the convenience for researchers in drawing their research subjects from the ranks of their own college students has resulted in a dearth of research on older language learners in non-university settings. Her search of several databases, which she describes in detail, turns up an interesting list of journal articles published in the last nine years in a wide range of disciplinary journals. Wagner's bibliographic essay shows how a high-tech literature search can facilitate inquiries into neglected areas of research and bring together appropriate literature from sources which might be scattered across a network of campus research libraries.

Our Special Feature in this issue of *IAL* presents the views of six faculty members and six graduate students from six different graduate programs in applied linguistics on the topic of training applied linguists for the future. The idea for this piece came from Marianne Celce-Murcia, who organized a panel discussion on "Training Applied Linguists for the Future" at the recent AAAL conference in Seattle, and who, assisted by Susan Strauss, *IAL*'s

Special Feature Coordinator, graciously offered to turn the panel into a special feature that would include the voices of graduate students. The result is the longest and, I believe, most controversial Special Feature we have ever run, for it cuts to the heart of the issue of what a graduate program in applied linguistics should look like as we near the end of the 20th century, given institutional constraints and the history and diversity of our field.

Finally, in the Reviews section, Marianne Celce-Murcia reviews the two-volume collection of selected papers from the 1987 AILA conference in Sydney, Australia, and Antony John Kunnan reviews a recent book on the political implications of multilingualism in India today.

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Lady Wishfort: Well, friend, you are enough to reconcile me to the bad world, or else I would retire to deserts and solitudes. Dear Marwood, let us leave the world, and retire by ourselves and be shepherdesses.

William Congreve
The Way of the World, Act V

This issue marks my fifth, and last, issue with *IAL*. As Assistant Editor to Antony Kunnan, I saw the first three issues through to publication, and as Editor I oversaw the two most recent issues, including *IAL*'s first special guest-edited issue on Socialization through Language and Interaction. As I step down in order to devote my time and energies to my dissertation research, I would like to thank a number of people who have been supportive of *IAL* from its very beginning. The first to thank is Larry Selinker, quoted at the beginning of this editorial, who purchased the very first individual subscription to the journal, and all the other charter subscribers who put their money down when *IAL* was only an idea, thus providing us with some start-up funds that set our activities in motion. I must also express my gratitude to the faculty and administrative staff of the Department of TESL & Applied Linguistics at UCLA who have supported *IAL* materially, logistically, and spiritually, helping to make this extra-curricular activity a professionalizing activity for all the graduate students who chose to get involved.

A word of thanks is also due to all of the authors who submitted manuscripts to *IAL* and to all of the readers who agreed to referee manuscripts for the journal. It's all very well to decide to start a journal, but without manuscripts there would be no journal, and without referees there would be no quality control and no constructive input for accepted authors to revise their manuscripts. Finally, I must thank all my fellow graduate students who, over the last two and one half years, took on various editorial, managerial, and clerical responsibilities, on a strictly voluntary basis, and made *Issues in Applied Linguistics* into what it is today. Special thanks is of course due to those colleagues who shared the responsibilities of the editorial committee and the vision of the journal's mission-- Antony Kunnan, Anne Lazaraton, Patrick Gonzales, Rachel Lagunoff, and Joseph Plummer.

It is Joseph Plummer, a first-year M.A. student, who has been appointed the next Editor-in-Chief of *IAL*. Joe took over the responsibilities of Managing Editor at the end of 1991 and brings a fresh view and unbounded enthusiasm for overseeing the next generation of editors and the next volumes of the journal, one of which is scheduled to be a guest-edited special issue on Neurobiology and Language Acquisition. As this issue goes to print, Joe is assuming the responsibilities of Editor-in-Chief. I hope all of our readership and the community of graduate student and faculty applied linguists will support Joe and continue to support the journal. It's off to a great start--let's all keep it going.

June 1992   Sally Jacoby

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Sally Jacoby, a Ph.D. student in the Applied Linguistics program at UCLA, is interested in discourse analysis, conversation analysis, scientific discourse, and authenticity in language pedagogy.

Dimensions of Locus of Control: Exploring Their Influence on ESL Students' Interlanguage Development

Arlene Clachar
Inter-American University of Puerto Rico

This paper reports the findings of a study which sought to determine whether adult ESL students with internal orientations on two dimensions of locus of control also have positive expectancies about their life situations in the United States and therefore show a higher degree of proficiency in their English interlanguage than their counterparts with external orientations on these same two dimensions. Broadly speaking, internal orientations of locus of control refer to people's belief that rewards in life are contingent on their own actions. External orientations refer to people's belief that rewards occur independently of their actions and that life situations are determined more by fate and luck (Rotter, 1966, 1975; Lefcourt, 1982). The study acknowledged that locus of control is a complex and multidimensional construct; that is, a person not only does not necessarily have similar internal or external orientations across a broad range of situations, his or her other orientations may differ with respect to the particular dimension of locus of control being measured (Wilhite, 1986). In the present study, internal-external orientations on two different dimensions of locus of control (locus of responsibility and locus of personal control) were investigated in order to observe their effect on interlanguage development. The findings show that locus of personal control correlates significantly with interlanguage development. Rationalizations for and implications of the findings are discussed.

INTRODUCTION

Locus of control, a construct from social learning theory, is thought to determine where people place control of their lives, that is, who or what they perceive to be controlling the rewards and failures they experience (Rotter, 1966, 1975). Measures of this construct are reported in terms of people having an internal or external orientation. People with an internal locus of control place

the responsibility for their lives within themselves. They believe that they determine the successes and failures they encounter in their lives and that they can control their own destinies. Those with an external orientation place control of their lives outside themselves, as being the result of the influence of fate, chance, luck, powerful others, etc. They do not feel responsible for their lives because they perceive that their behavior does not affect the reinforcements they receive (Wilhite, 1986; Rotter, 1966, 1975). Locus of control is highly correlated with an individual's cultural upbringing and life experiences and shapes the way an individual thinks, makes decisions, and defines events (James, 1990; Sue, 1981). For minorities in the United States, a strong determinant of locus of control is very much related to the subordinate position assigned to them in society. It is also important to understand that locus of control is a very complex and multidimensional construct; a person not only does not necessarily have similar internal or external orientations across a broad range of situations, his or her orientations may differ with respect to the particular dimension of locus of control being measured (Wilhite, 1986; Sue, 1981).

This paper reports the findings of a study which sought to determine whether adult ESL students with internal orientations on two dimensions of locus of control have positive expectancies about their life situations in the United States and therefore show a higher level of proficiency in their English interlanguage than their counterparts with external orientations on these two dimensions. The hypothesized relationship between orientations of locus of control and interlanguage development that was investigated emerged from the observation that non-English-speaking immigrants of lower socioeconomic status (a representative population in most ESL/adult basic education classes in large U.S. cities) find themselves in a situation in which the acquisition of English begins the process of gaining control in their lives: getting a job, having access to needed services, and attaining upward social mobility. In this context, interlanguage development was believed to be influenced by the degree to which an adult ESL student feels control over certain forces in his or her life situations, or, in other words, by the student's orientation of locus of control (LOC).

Locus of Control: Its Meaning in the Context of Acquiring English as a Second Language in the U. S.

In describing the students in classes designed for teaching English to adult immigrants, Wallerstein (1983) states:

> the majority of ESL students come from a low socioeconomic background. Most have little formal education. They experience many situations in the U.S. which make them feel vulnerable and inadequate. Even if they possess technical skills, ESL students have limited access to jobs. They are often humiliated for their "accent" and blame themselves for not succeeding in America. These problems (with life in the United States) affect students' self images which often create difficulties in learning English. (p. 4)

In the face of the social and psychological turbulence experienced by non-English-speaking immigrants, exacerbated by the need to acquire English for job eligibility, access to needed services, and ultimately by a desire for upward social mobility, I was led to the hypothesis that internally oriented immigrants, who believe in their ability to overcome the adversities of a new sociocultural environment in order to secure rewards, would exhibit a higher level of proficiency in English than the externally oriented ones, who succumb to an overwhelming sense of unpredictable fate. The assumption made was that a non-English-speaking immigrant's interlanguage development is in part a function of LOC.

In discussing LOC, it is important to note that it is a *construct* and not a trait. Lefcourt (1982) warns against misuse of this construct:

> An individual's LOC is often inferred from momentary expressions of his sense of causality which, if solicited at different points in time, may be relatively consistent. However, it must be kept in mind that events such as expressions of causal expectations are but referents of the LOC construct and not the construct itself. LOC is not a characteristic to be discovered within individuals. It is a construct, a working tool in social learning theory that allows for an interpretation of remarks made by people in response to questions about causality. The remarks, expressions, and behaviors indicative of beliefs about causality are the events that psychologists observe and test for reliability, and measures such as Rotter's LOC scale are

simply devices created to elicit those expressions of belief.
(pp. 148-9)

Lefcourt also explains that LOC scales may elicit quite different responses when different situations are invoked, and he therefore recommends that each research case be analyzed and interpreted in the context of the situation being studied. A *situation*, as described in the social learning context, consists of cues that lead to expectations for a variety of behavior-reinforcement sequences (Lefcourt, 1982). For example, it can be argued that immigrants of lower socioeconomic status and Afro-Americans are not given as equal an opportunity as certain other groups to obtain material rewards in the United States. Because of this discrimination, they may perceive a discrepancy between their own ability and what they can achieve. As a result, a situation may exist in which non-English-speaking immigrants of lower socioeconomic status and Afro-Americans hold the expectancy that their behavior cannot determine the outcomes or reinforcements they seek, a phenomenon which is likely to shape their LOC. Lefcourt maintains that the notion of *situation* needs to be clearly stated in any theory that using the construct of LOC.

In the present study, the notion of *situation* assumed a heightened significance because non-English-speaking immigrants of lower socioeconomic status were the target population for the research, and because, in the U.S., these immigrants generally find themselves in situations where they have had a history of failure-- failure tied to real external obstacles, such as cultural discrimination, racism on the job, layoffs, etc. (Wallerstein, 1983). Their external orientation, therefore, may be a function of their opinions about the prevailing social institutions in which they have to operate.

However, Gurin & Gurin (1976) have concluded, that while high external people are less effectively motivated, perform poorly in achievement tasks, and evidence greater psychological problems, this profile does not necessarily hold for all minorities and low-income persons. These authors emphasize that focusing on external forces may be motivationally healthy if it results from assessing one's chances for success against systematic and real external obstacles rather than against an unpredictable fate. Gurin & Gurin therefore ventured the assumption that in spite of the economic deprivation and social denigration faced by immigrant minorities, there seems to be a distinction between those who are able to come to terms with socioeconomic and racial barriers,

viewing themselves as active controllers of their fate, and those who perpetuate a fatalistic outlook.

Pursuing this line of reasoning, I was led to hypothesize that immigrants of low socioeconomic status who are internally controlled, believing themselves to be agents of change rather than passive recipients of history and fate, would be able to generate the motivation necessary to achieve a high degree of proficiency in English--an important step in the movement toward socioeconomic success. Concomitantly, when immigrants hold an external orientation, succumbing to the fatalistic attitude that they cannot effect positive change in their lives, their motivation to achieve proficiency in English (for socioeconomic success) would be low.

Locus of Control: A Multidimensional Construct

Apart from the notion of *situation* discussed above, another concern that must be underscored when using LOC as a measure of people's control orientations is that this construct is *multidimensional*; that is, people do not necessarily have similar internal or external orientations across a broad range of situations, and control orientations differ as a function of the particular dimension of LOC being measured (Wilhite, 1986; Sue, 1981). To illustrate this point, it is worth considering the findings of Gurin & Gurin (1976) who identified three dimensions of LOC. However, only two of these dimensions are relevant to the present study. The first, control ideology, is a measure of general belief about the role of external forces in determining success and failure in the larger society. It represents a cultural belief in the Protestant ethic: that success is the result of hard work, effort, skill, and ability. The second dimension, locus of personal control, reflects a person's belief about his or her own sense of personal efficacy or competence. While the former dimension represents an ideological belief, the latter is more related to actual control. Gurin & Gurin's data indicated that Afro-Americans were equally as internal as whites on the control ideology dimension, but when a personal reference (locus of personal control) was used, they were much more external. The authors concluded that Afro-Americans may have adopted the general cultural beliefs about internal control but find they cannot always be applied to their own life situations because of racism and discrimination.

It was these two dimensions of locus of control--locus of personal control and locus of responsibility--which were measured for use in the present study, using the Spanish version of

Wolfgang & Weiss's (1980) Interpersonal Locus of Control (WWILOC).[1] It is important to note that the original WWILOC Scale (see Appendix) was developed to measure only interpersonal locus of control. The two subscales (i.e., locus of personal control and locus of responsibility) were derived for the present study from an item analysis of the WWILOC Scale. It will be shown in this paper that although the data elicited by these two subscales can only be interpreted as exploratory because of the relatively small number of items on each, the study nevertheless represents a pioneering attempt to understand the role of locus of control in second language acquisition and therefore provides a theoretical basis on which to build future research.

Locus of Personal Control and Locus of Responsibility

A brief description of the two dimensions measured for this study and their hypothesized relevance to certain social and psychological aspects of second language acquisition (SLA) now deserve some attention. As has been noted, the first dimension, locus of personal control, reflects the extent to which an individual believes in his or her sense of personal efficacy or competence (Gurin & Gurin, 1976). Sue (1981) describes locus of personal control as a composite factor of (a) self-esteem (attitudes and feelings which reflect beliefs and perceptions of what one can do or achieve), (b) role-expectation (acceptance of aspirations and demands that one thinks others or significant others expect of one), (c) self-adequacy (the security with which a person views his or her present and future possibilities of success). An internal orientation on locus of personal control represents a strong belief in personal efficacy, whereas an external orientation refers to the belief that one's choices, decisions, and reasonings are inextricably bound up with external forces such as fate, chance, or luck. This belief in external forces as determinants of outcomes in one's life engenders low self-esteem and mediocre aspirations (Booth-Butterfield, 1989; Lefcourt, 1982).

The study of the role of locus of personal control in SLA seems particularly appealing since, as Beebe (1988) states, speaking a second language involves stripping oneself of the protective devices normally provided by the native language and reverting to a less mature level of expression, both factors which are likely to make second language speakers feel vulnerable and ridiculous. The degree to which these factors become devastating for a language learner, so much so as to retard SLA, may depend

on that individual's locus of personal control, that is, on such attributes as self-esteem, sense of self-adequacy, and role expectation. In the face of these and other psychological adversities accompanying the SLA process, I hypothesized that an internal orientation on locus of personal control is likely to contribute to a favorable affective disposition for successful SLA.

The second dimension in the WWILOC Scale is locus of responsibility. In essence, as was discussed earlier, this dimension measures the degree of responsibility or blame placed either on the individual or on the system (Sue, 1981). For example, Sue (1981) points out that in the case of Hispanic immigrants or Afro-Americans of lower socioeconomic status, their lower standard of living may be attributed to their personal inadequacies or shortcomings (such as low proficiency in Standard English and thus an inability to mobilize themselves in the job market), or the responsibility for their plight may be attributed to discrimination and lack of opportunity to participate in society on an equal footing with less disadvantaged groups. The former orientation blames the individual, the latter blames the system.

Theoretically, then, locus of responsibility reflects both the internal orientation that because success or failure is attributed to one's own skills or personal inadequacies, a strong relationship exists between one's ability, effort, hard work, and success in society *and* the external orientation that social, economic, and political forces (rather than personal attributes) are powerful and shape an individual's destiny in the socio-political establishment. I thus hypothesized that an immigrant's orientation on the locus of responsibility dimension may influence how s/he defines the SLA process: if the immigrant believes that there is a strong relationship between skill, effort, ability, hard work, and socioeconomic success (internal orientation), the acquisition of English may be perceived as an achievement-oriented task, controllable by the learner and constitutive of a strategy for the procurement of socioeconomic benefits. Maximum linguistic development (achieved through skill, effort, and ability) may then be representative of having begun to pave the way to socioeconomic success. On the other hand, if an immigrant believes that social, political, and economic forces are more powerful than anything s/he can do and thus shapes his or her destiny in society (external orientation), then the acquisition of English may not be viewed as an achievement-oriented task to procure social rewards. Instead, the immigrant perceives the socioeconomic benefits of acquiring English to be so remote that English proficiency is felt to be more a

function of luck or chance than of achievement. Proficiency in English, thus interpreted by the immigrant, is an arbitrary and non-significant factor in determining future socioeconomic success.

Research Questions

The study thus addressed the following questions:

1. Do adult ESL students with a more internal orientation on the locus of personal control subscale evidence higher levels of proficiency in their English interlanguage?

2. Is an internal orientation on the locus of responsibility subscale significantly correlated with English interlanguage development?

METHOD

Subjects

The subjects who participated in the study were Hispanic immigrants of low socioeconomic status (27 females and 13 males) who were enrolled in an adult basic education (ABE) program sponsored by the New York City Board of Education. The socioeconomic status of the subjects was established on the basis of the social stratum with which the subjects affiliated themselves, according to several factors: (a) socioeconomic status of the family in which the subjects were reared (37 subjects stated that their parents were of lower socioeconomic status and 3 classified their parents as members of the working class); (b) number of years of high school education which subjects had in their native country (23 subjects completed 2 years of high school, 15 completed 3 years, and 2 completed 4 years but had not attempted to go beyond post-secondary education); (c) educational level of subjects' parents (29 subjects said their parents did not have a high school education, 9 stated that their parents completed 2 years of high school, and 2 stated that their parents completed only 1 year of high school); (d) subjects' occupations in their native country (all subjects reported non-professional, blue-collar jobs); (e) subjects' weekly salaries (7 subjects reported that they were making below the minimum wage, 28 said they earned minimum wage, and 5 said they were earning a

little more than the minimum wage); and (f) number of wage earners in subjects' households (the subjects stated that all adults in their households were employed).

Controlled Variables

age: The subjects were adults between the ages of 21 and 30. Levinson et al. (1976) have identified this age range as a clearly defined period within the life span during which an individual's focus is on the exploration of and personal commitment to adult roles and responsibilities.   Issues of risk-taking preferences and occupation choices are crucial at this period and are often affected by one's LOC (Gurin et al., 1969).

length of time working in the U.S.:   The subjects had all been working in the U.S. for three to six years.   This control was necessary to establish a reasonable time-frame in which the subjects would have had sufficient opportunity to interact in English.

informal contact with English: Obviously, not all immigrant Hispanics of low socioeconomic status have jobs which bring them into contact with speakers of Standard English, and thus not all immigrants have the same opportunities to develop their proficiency in English.   To control for this variability, only those subjects who stated (on the demographic survey questionnaire) that they speak English "sometimes" were selected for the study.[2]   Moreover, many Hispanics of lower socioeconomic status work in environments where some of their linguistic input is likely to come from the non-standard English dialects spoken by Afro-Americans and West Indians.   Since it was assumed that such input is likely to influence the interlanguage of Hispanics, another requirement for participation in the study was that subjects had to be receiving formal ESL instruction which, presumably, provided a basis of corrective reinforcement upon which to improve their language proficiency.

formal contact with English: The selection of subjects who were exposed to formal English instruction was particularly important because Krashen & Scarcella (1978) have observed that formal instruction is a better prediction of proficiency among adults than are years of natural exposure to the target language. Schumann (1975) agrees that formal instruction in English may facilitate SLA in a number of ways: by supplying more input

through dialogues, practice sentences, and exercises; by helping the adult learner to isolate grammatical and lexical elements, thus making them more perceptually salient and identifiable in informal interaction; and by assisting the learner to construct a conscious grammar which can be used to monitor his or her speech in informal interaction.

All subjects were chosen from two ESL/ABE sites in New York City. Based on information derived from the demographic survey questionnaire, homogeneity among the 40 subjects was controlled with regard to (a) their knowledge of English at the beginning of study and their prior exposure to English when they enrolled in the ESL program; (b) the content of the syllabus--only those linguistic structures already taught in the ESL classes were used in the study to measure the subjects' degree of interlanguage development; and (c) the number of hours of ESL instruction per week.

reading level in Spanish: The demographic survey questionnaire and the WWILOC Scale were administered in Spanish because a lack of reading proficiency in English could have led the subjects to misinterpret many of the items. Therefore, in order to ensure that subjects had acquired at least an eighth-grade reading level in Spanish, I administered a Spanish reading achievement test (Calfee, Calfee, & Peña, 1979) at the start of the study.

Collection of Speech Data

English language performance (or the degree of interlanguage development in each subject's speech sample) was defined by the extent to which a subject showed linguistic development in the use of (a) negation forms, (b) interrogative forms, (c) morphophonemic rules for past forms, and (d) morphosyntactic rules for the possessive. These four linguistic indices were chosen because they had been taught in the ESL classes and because research in SLA has shown them to be sensitive indicators of language development (Hatch & Wagner-Gough, 1983; Ravem, 1975; Milon, 1974; Butterworth, 1972).

Two techniques were used to elicit speech samples: a story retelling task and a photograph description task. The story retelling task required each subject to retell stories heard on a tape-recorder in his or own words. The original stories, taken from Myers (1987), had to be modified in order to introduce the four types of

syntactic and morphosyntactic structures which were used as linguistic indices of interlanguage development. The modification of the texts was done by changing the original sentences (which were in the simple present and present progressive tenses) to the simple past, past progressive and past perfect tenses. Also, several negative sentences and sentences with the possessive "s" morpheme were introduced into the stories. In the photograph description task, subjects first listened to a tape-recorded situation depicted in the photographs and were then given directives (such as "Pretend that you are . . . and ask . . . where . . . ?") so as to elicit interrogative forms. The recording session for each subject lasted approximately one hour. Interrater reliability was established by having two monolingual English speakers evaluate transcripts of the data produced by the subjects.

Following Schumann's (1975) pidginization model for analyzing interlanguage development, subjects were classified into three proficiency groups: those who evidenced the lowest degree of linguistic development (Schumann's basilang ESL students); those who showed a higher degree of linguistic development (Schumann's mesolang ESL students); and those with the highest level of interlanguage development (Schumann's acrolang ESL students). The *basilang* stage is characterized by many pidginized forms, i.e., ESL students show very little linguistic development in the direction of Standard English. The *mesolang* stage (what O'Malley, Chamot, & Walker (1987) call the associative stage) is a point at which pidginized forms are gradually corrected as ESL learners become more proficient in detecting discrepancies between their language production and the models they encounter. As has been postulated in the literature, the *mesolang* stage appears to represent a temporary interlanguage system that is constantly restructured as the ESL learner evaluates attempted hypotheses about the target language and adds, drops, or modifies rules as a result. Further, rules that are productive at the *basilang* stage begin to disappear in the *mesolang* stage. Because the *mesolang* stage operates as a rubric for varying degrees of proficiency in detecting mismatches between pidginized forms and standard forms, it seemed justifiable to refine this stage into *lower*, *mid-* and *upper mesolang* stages corresponding to a decreasing occurrence of pidginized forms respectively. At the *acrolang* stage, ESL students exhibit very few pidginized forms and approach standard English norms of morphosyntax. For details of the forms prevalent at each stage of the *basilang-mesolang-acrolang* continuum with specific reference to the negation and interrogation systems, the

morphophonemic rules for past forms, and the morphosyntactic rules for the possessive, see Schumann (1975) and Stauble (1978, 1984).

Negation Development

How well each subject had acquired the English negation system was analyzed in terms of the well known developmental stages of negation acquisition, which begin with a preverbal negation rule and end with the Standard English postverbal negation rule. The degree to which each subject in the study had progressed along the basilang-mesolang-acrolang continuum was assessed using Schumann's (1975) technique, namely, by calculating the ratio of the standard negating devices used (e.g., analyzed do-aux forms, postverbal negation rule applied to the copula and modals, etc.) in relation to the total number of negative forms produced by each subject. Ratios were then converted to percentages. The criterion for acquisition (i.e., the acrolang stage) was set at 80%. Scores of 50-59%, 60-69%, and 70-79% characterized the lower mesolang, mid-mesolang, and upper mesolang ESL students respectively. Basilang ESL students were those subjects whose scores fell below 50%.

Interrogative Development

In order to classify subjects along the basilang-mesolang-acrolang continuum with respect to their use of English interrogative rules, the subjects' speech data was examined for a progression from no inversion of the subject noun phrase and auxiliary/copula/modal (e.g., "Where you are going?") to inversion of the subject noun phrase and auxiliary/copula/modal (e.g., "Where are you going?"). This progression in ESL learners' interlanguages has been categorized into three stages by Schumann (1975) based on cross-linguistic studies. The criteria used for distinguishing these three stages for the development of interrogative forms are as follows:

> *basilang*: Subject does not distinguish between simple and embedded wh-questions, e.g., "What is he doing?" (simple wh-question--inversion) compared with "Did he tell you *what he is doing*?" (embedded wh-question--no inversion). For basilang subjects simple and embedded wh-

questions do not carry *inversion*. Yes/No questions are also *uninverted*.

mesolang: Simple wh-questions are sometimes inverted and sometimes not. In addition, there is increasing inversion in simple wh-questions, with inversion extended to embedded wh-questions, e.g., *"Does he know *where are you going*?"

acrolang: Subject distinguishes between simple and embedded wh-questions; yes/no questions are inverted.

The extent to which each subject had acquired the interrogative inversion rule for simple wh-questions and yes/no questions was determined by computing ratios to indicate the frequency of inversion of the subject noun phrase and the auxiliary/copula/modal supplied in obligatory contexts in relation to the total number of obligatory contexts for inversion. This computation yielded a supplied in obligatory contexts (SOC) ratio which was then converted to a percentage. The degree of mastery for embedded wh-questions was determined by calculating an SOC ratio representing the frequency of no inversion of auxiliary/copula/modal and the subject noun phrase of the embedded clause in relation to the total number of possibilities for embedded wh-questions. The resultant SOC ratio was converted to a percentage. For each subject, the mean percentage for the two types of interrogative transformation rules was calculated in order to yield a single score for this linguistic structure. The criterion for acquisition of the interrogative, i.e., the acrolang stage, was set at 80% (in accordance with Schumann, 1975). Scores of 50-59%, 60-69%, and 70-79% characterized the lower mesolang, the mid-mesolang, and the upper mesolang ESL students, respectively. Basilang ESL students were those subjects whose scores fell below 50%.

Development of Possessive "s" Morpheme

The degree to which subjects had acquired the possessive "s" morpheme (and, thus, their designation as basilang, mesolang, or acrolang speakers) was assessed by computing SOC ratios representing the frequency of the possessive morpheme supplied in obligatory contexts in relation to the total number of obligatory

contexts for the possessive morpheme. These SOC ratios were then computed as percentages.

However, a more in-depth look at the data revealed that one could not accurately assess the acquisition of the possessive morpheme in the speech of some subjects *only* on the basis of an SOC analysis; a measurement of the extent to which the possessive morpheme was used inappropriately outside of obligatory contexts was also necessary. Since the problem is that an SOC score does not reflect when a morpheme is used correctly in other than obligatory contexts, another type of analysis, similar to that used by Hakuta (1976) and Stauble (1984), was employed. I refer to this procedure as a target-like use (TLU) analysis. Such an analysis captures instances in which subjects use the possessive morpheme inappropriately in contexts other than obligatory contexts, and thus the total number of inappropriate uses outside of obligatory contexts was added to the denominator of the SOC ratio to compute the TLU ratio. For example, when a subject used the possessive morpheme five times out of ten (i.e., 5/10 or 50 %) correctly but also used that morpheme on four different occasions inappropriately outside of obligatory contexts, the number 4 was added to the 10 of the denominator to calculate the TLU ratio: 5/10 + 4 = 5/14 or 36%. The TLU ratio is thus always lower than the corresponding SOC ratio when a particular morpheme is used inappropriately outside of obligatory contexts. The rationale for the TLU analysis is supported by the following examples taken from the speech data:

appropriate use in obligatory context

"I saw the man's hat through the window."

non-use in obligatory context

"He decided no take the place that have the lady"
(possible meaning: 'the lady's place')

inappropriate use outside of obligatory context

". . . because she didn't see that the man's it belong."
(intended meaning: 'She didn't see that it belonged to the man.')

Because several subjects used the possessive morpheme both appropriately in obligatory contexts and inappropriately outside of obligatory contexts, the TLU analysis appeared to give a more precise representation of the extent to which their interlanguages had developed in the direction of Standard English. The criterion for the acquisition of the possessive morpheme (i.e., the acrolang stage) was set at 80%. Scores of 50-59%, 60-69%, and 70-79% characterized lower mesolang, mid-mesolang, and upper mesolang ESL students, respectively. Those subjects whose scores fell below 50% were considered basilang ESL students.

Development of Past Forms

The degree to which each subject had acquired the morphemes to mark past time was determined by examining two levels of the use of verb morphology: the lexical level and the auxiliary level. At the lexical level, the focus was on the appropriate morphophonemic changes for the past tense of regular and irregular verbs. At the auxiliary level, the focus was on the appropriate past forms for the progressive aspect (*be-aux + V-ing*) and the perfective aspect (*have-aux + V-ed*). The analysis of past forms was limited to affirmative sentences. The acquisition of the past forms in each subject's speech was based on: (a) the ratio of correct usage of the past tense supplied in obligatory contexts in relation to the total number of obligatory contexts for the past tense (this SOC ratio was converted into a percentage); (b) the ratio of correct usage for the past progressive aspect in obligatory contexts in relation to the total number of obligatory contexts for the past progressive aspect, with the resulting SOC ratio converted into a percentage; and (c) the ratio of correct usage for the past perfective aspect in obligatory contexts in relation to the total number of obligatory contexts for the past perfective aspect. Again, this SOC ratio was computed as a percentage.

As was the case in assessing the degree of acquisition of the possessive morpheme, a TLU analysis was also necessary to evaluate the development of the past progressive and perfective aspects. It was discovered that some subjects supplied the past progressive and perfective aspects inappropriately outside of obligatory contexts--a finding which was not captured by the SOC scores alone. A few examples from the speech data exemplify this point:

inappropriate use of past progressive outside of obligatory context

> "In my country, the people *was eating* rice everyday"
> (intended meaning: 'In my country, people *eat* rice everyday.')
>
> "The people *was cleaning* the machines on Tuesdays because the manager check them"
> (intended meaning: 'The people *had to clean* the machines on Tuesdays because the manager would check them.')

inappropriate use of past perfective outside of obligatory context

> "The receptionist who *had make up* the forms for the people who speak Spanish doesn't work there again."
> (intended meaning: 'The receptionist who used to/would make up [complete] the forms for the people who speak Spanish doesn't work there anymore.')
>
> ". . . he always *had spoken* to the factory workers in English on the job but outside he speak in Spanish."
> (intended meaning: '. . . he always speaks to the factory workers in English but . . . .')

Thus, for each subject whose speech included such errors, I computed a TLU ratio and converted it into a percentage. An overall score for each subject was obtained by adding together the SOC scores for the three past forms, or, for those subjects who supplied some past forms inappropriately outside of obligatory contexts, by adding together the SOC and TLU scores. The criterion for acquisition of the past forms, that is, the acrolang stage, was set at 80%. Scores of 50-59%, 60-69%, 70-79% characterized lower mesolang, mid-mesolang, and upper mesolang ESL students, respectively. Scores which fell below 50% represented basilang ESL students.

RESULTS

After examining each subject's development in each of the four linguistic indices a mean score for each subject was computed. This resulting mean score theoretically represented the degree to which each subject's speech had progressed in the direction of Standard English or, concomitantly, had pidginized, according to the basilang-mesolang-acrolang continuum. Table 1 displays the mean scores and classification of the subjects along the basilang-mesolang-acrolang continuum:

Table 1. Classification of Subjects According to Overall Scores*

Subjects N = 40	Negative Forms (%)	Interrog. Forms (%)	Past Forms (%)	Poss. "s" Morpheme (%)	Overall Score (%)
Basilang					
Cecilia	21	39	52	31	3 6
Topacia	7	43	55	45	3 8
Luz	21	41	53	34	3 7
Mirta	24	39	59	31	3 8
Luis	18	48	53	45	4 1
Tony	19	58	53	36	4 2
Ana	20	46	57	39	4 1
Fernando	16	51	59	43	4 2
Soraya	33	53	52	34	4 3
Carmen	49	39	52	51	4 8
Isabel	38	46	57	58	4 9
Lower Mesolang					
Pedro	44	55	63	37	5 0
Rosemary	40	51	64	53	5 2
Bernaldo	50	43	64	55	5 3
Sonia	56	58	65	39	5 5
Miguel	37	56	68	56	5 4
Cristóbal	51	53	68	55	5 8
Jesús	60	59	63	55	5 9
Lora	61	61	57	50	5 7

Mid-Mesolang

Gloria	60	65	65	55	6 1
Rosa	61	67	68	58	6 4
Fanny	65	62	60	71	6 5
Yani	78	62	65	65	6 8
Betsaida	63	65	65	77	6 8
Carlos	68	69	67	63	6 7

Upper Mesolang

Alicia	79	62	86	63	7 3
Claribel	67	66	64	91	7 2
José	69	75	83	67	7 4
Hortensia	76	71	80	67	7 4
Quisqueya	75	71	81	68	7 4
Linda	77	69	80	61	7 2
Ricardo	74	75	85	61	7 3
Mimi	79	78	87	66	7 8
Betty	79	76	81	68	7 6

Acrolang

Josefina	81	89	81	80	8 3
Mona	84	83	82	82	8 3
Javier	87	87	91	74	8 5
Terry	89	87	84	82	8 6
Efrén	91	90	83	85	8 7
Narisa	91	87	85	85	8 7

*Classification of subjects was determined only on the basis of overall scores, not on individual scores for negation, interrogation, past forms, and the possessive "s" morpheme.

With the subjects classified as to interlanguage development, it was now possible to address the central research questions of this study, which can be stated operationally as: Do basilang and lower mesolang ESL students show more of an external orientation on the locus of personal control dimension and on the locus of responsibility dimension of LOC than their upper mesolang and acrolang counterparts? Are upper mesolang and acrolang ESL students more internal on these two dimensions than basilang and lower mesolang speakers? In order to answer these questions, the control orientation of each subject on each of these two dimensions of LOC had to be established by administering the WWILOC Scale.

The WWILOC Scale

As mentioned earlier in this paper, the WWILOC Scale was used to gather data on the subjects' control orientations. The scale (see Appendix) consists of 31 forced-choice items, each one presenting an internal and external perception of interpersonal relationships in the English-speaking world. Of the 31 items, 22 pair internal and external control expectancy statements--a respondent is required to select the statement that seems most true for him/her. For example, in the following item,

> a. In the long run, I get the respect that I deserve regardless of the language I am speaking.
> b. Unfortunately, Americans often do not recognize my worth as a person, in spite of my effort to speak English.

the participant who selects "a" has selected an internal response. The remaining nine items present statements to which the participant is asked to respond "Yes" or "No." A "Yes" answer indicates that the individual mostly agrees with the statement, while "No" indicates a general disagreement. For example, in the item,

> Whenever you have to speak in English, do you frequently feel that Americans are manipulating your behavior?
> YES   NO

the respondent who answers "Yes" has selected an external response. The WWILOC Scale embodies two dimensions of LOC: locus of personal control and locus of responsibility, both of which represent subscales. Twelve of the items measure control orientations on locus of personal control, and nineteen measure control orientations on locus of responsibility.

The WWILOC Scale is scored in the direction of externality. One point is given for an externally oriented response; no points are given to internal responses. Therefore, the highest internal score on locus of person control and locus of responsibility would be zero, and the highest external score would be 12 and 19 on the locus of personal control and locus of responsibility subscales, respectively. The WWILOC Scale was chosen because it represents an excellent example of the advancements made in the area of LOC measurement. The scale was designed for a specific population, namely, recent immigrants to a highly industrialized country. It also specified what dimensions were being measured--

powerlessness or perceived control in interactions with people in general and with significant others in one's environment in particular.

Moreover, the WWILOC Scale was especially appropriate for this study because the items tapped the degree to which the use of English symbolized an immigrant's sense of power and powerlessness in his or her daily communicative interaction in the United States. Table 2 shows the scores for the two dimensions of LOC, and Table 3 displays the means, standard deviations, and ranges:

Table 2. Scores for the Two Dimensions of LOC*

Subjects N = 40	Locus of Personal Control	Locus of Responsibility
Basilang		
Cecilia	7	12
Topacia	6	12
Luz	0	4
Mirta	10	15
Luis	8	14
Tony	12	12
Ana	9	15
Fernando	5	9
Soraya	5	11
Carmen	4	3
Isabel	1	5
Lower Mesolang		
Pedro	0	5
Rosemary	5	13
Bernaldo	8	10
Sonia	7	12
Miguel	1	6
Crisóbal	4	12
Jesús	5	12
Lora	10	9

Mid-Mesolang

Gloria	4	10
Rosa	9	16
Fanny	11	14
Yani	3	15
Betsaida	2	5
Carlos	12	14

Upper Mesolang

Alicia	0	7
Claribel	4	10
José	7	12
Hortensia	5	10
Quisqueya	1	4
Linda	5	11
Ricardo	1	5
Mimi	1	6
Betty	3	16

Acrolang

Josefina	1	6
Mona	7	11
Javier	0	5
Terry	1	3
Efrén	5	9
Narisa	4	11

*For each locus of control dimension, a score of zero was accorded an internal response and one point for an external response. Thus the lower the score, the more internally oriented a subject is expected to be.

Table 3. Means, Standard Deviations, and Ranges for WWILOC Scales

WWILOC Scales	Mean	SD	Range
Locus of Personal Control	4.8	3.52	0-12
Locus of Responsibility	9.8	3.88	3-16

Analysis of the Relationship between Interlanguage Development and LOC Dimensions

In order to determine the relationship between locus of personal control, locus of responsibility, and interlanguage development, the two research questions were tested through coefficients of correlations and analyses of regression using SPSS-X. Because significant correlations were found, the regression analyses were undertaken to determine which LOC dimensions were explaining a significant portion of the variance in language performance when possible confounding demographic variables were controlled. Table 4 reports the correlations among the LOC scores and language performance:

Table 4. Correlations among LOC Scores and Language Performance

Variables	Language Performance	Locus of Personal	Locus of Responsibility Control
Language Performance	--	-.34	.22
Locus of Personal Control	-.34*	--	.73*
Locus of Responsibility	-.22	.73*	--

*p < .05

As can be seen in Table 4, locus of personal control was significantly negatively correlated with language performance (r = -.34, p < .05).[3] Further inspection of Table 4, however, revealed that locus of personal control and locus of responsibility were highly correlated with each other, supporting the validity of these scales as measures of the construct LOC, but indicating that the scores for the two dimensions of LOC should not be entered into the regression equations at the same time.

Although a great deal of effort was made in this study to control for demographic variables (such as age, highest grade completed, length of time worked in the U.S., English instruction in native country, and English instruction in the U.S. before registration in the ABE program), the subjects nevertheless differed with respect to these characteristics. It was therefore interesting to

determine whether these demographic variables correlated with the two LOC dimensions and with language performance. Table 5 reports the correlations among the demographic variables, the two LOC dimensions, and language performance:

Table 5. **Correlations among Demographic Variables, LOC Dimensions, and Language Performance**

Demographic Variable	Language Performance	Locus of Personal Control	Locus of Responsibility
Age	-.19	.11	-.02
Highest grade completed	-.08	.33*	.16
Length of time working in the U.S.	.27*	.10	.07
English instruction in native country	-.16	.24	.25*
English instruction in U.S. prior to registration in ABE program	-.12	-.17	-.15

*p < .05

Table 5 reveals that age and English instruction in the U.S. prior to registration in the ABE program were not significantly correlated with the LOC dimensions or with language performance. However, length of time working in the U.S. was significantly correlated with language performance (r = .27, p < .05). In addition, highest grade completed correlated positively with locus of personal control (r = -.33, p < .05), and length of English instruction in native country correlated positively with locus of responsibility (r = .25, p < .05).

The five demographic variables were then used as predictors of language performance in two separate hierarchical stepwise regression analyses. In both analyses, the demographic

variables entered the equation before the LOC scores in order to determine the amount of incremental variance accounted for by the LOC dimensions. Results are shown in Table 6:

Table 6. Regression Analysis of Language Performance on Demographic Variables and LOC Subscale Scores

Predictors	R	R^2	$F(R^2)$ change	R^2 change	$F(R^2)$	Beta	r
Time employed in U.S.	.2688	.0723	2.959	.0723	2.959	-.2634	-.2688
English instruction in native country	.3385	.1146	2.394	.0423	1.769	-.1408	-.1582
Highest grade completed	.3448	.1189	1.619	.0043	0.177	-.0309	-.0804
Locus of personal control	.4304	.1853	1.990	.0664	2.851	-.3466	-.3356
Locus of responsibility	.4342	.1885	1.580	.0032	0.136	.0845	.2177

As can be seen in Table 6, length of time working in the U.S., English instruction in the native country, and highest grade completed accounted for 11.9% of the variance; locus of personal control and locus of responsibility accounted for an additional 7%. However, it should be pointed out that at no time was the total or incremental variance accounted for significantly different from zero at the .05 level.

The implication of the results of the two regression analyses is that if one uses the demographic variables in addition to the two LOC scores as predictors, then language performance is, in essence, unpredictable. However, an alternative way of analyzing the data was available and was undertaken: correlating the two LOC scores with language performance scores, partialling out the

demographic variables. The results of this procedure indicated that locus of responsibility was not significantly correlated with language performance ($r = -.15$), but locus of personal control was ($r = -.27$, $p < .05$). It should be noted that although locus of personal control correlated significantly with language performance, it only accounted for 8% of the variance. This result may have been due to the relatively small number of items (12) in the locus of personal control subscale.

DISCUSSION

The salient finding in this study is that an individual's interlanguage development may be predicted by his or her locus of personal control. Essentially this means that acrolang and upper mesolang ESL students are likely to evidence a more internal orientation on locus of personal control than their basilang or lower mesolang counterparts.

One problem in a study such as this, however, is that there is no previous work which directly studies the relationship between proficiency in SLA and LOC, and thus it is not possible to compare the present findings with research in this area so as to bolster the findings or to identify moderator variables which may have led to discrepancies. Due to the dearth of information concerning language performance and LOC, I was obliged first to probe the current literature dealing with the psycho-affective characteristics of learners and their influence on SLA, then to seek a plausible behavioral link to an internal orientation on locus of personal control.

Beebe (1983), for example, in a ground-breaking article on risk-taking in second language acquisition, discusses the odds stacked against a person learning to communicate in a second language: fear of appearing ridiculous in the face of incomprehension, fear of frustration coming from a listener's blank look showing that the second language learner has not succeeded in communicating, fear of alienation stemming from not being able to communicate and therefore not being able to develop relationships with others, and, worst of all, the formidable fear of loss of one's cultural identity. Given these psychological barriers, Beebe submits that communicating in a second language involves both taking the risk of being wrong and being able to overcome possible failure.

Bem (1971) sees risk-taking as a choice, in which an individual decides among alternatives of different degrees of desirability; the result of the decision is not only uncertain, there is a possibility of loss or failure. His argument recognizes that it is only by taking the risk to communicate in a second language that a learner's hypotheses about the second language (encouraged by input from interlocutors) can be formed, tested, and confirmed or rejected. In Beebe's (1983) words, "risk-taking in learning to speak a second or foreign language must involve the learner trying out new structures he or she is unsure of" (p. 46). It seems feasible, therefore, to assume that a high level of proficiency in an ESL student's interlanguage could partly be explained by a willingness to take risks.

The observed relationship between higher levels of interlanguage development and internal orientation on locus of personal control may thus be explained by the risk-taking induced by personal control, a factor which seems to play a role in higher levels of English proficiency. I am inclined to speculate that it is the more proficient ESL students who, by their evidence of higher internality on locus of personal control, may have a greater propensity for risk-taking. The literature to date, although but briefly, does allude to a relationship between risk-taking and factors representative of internal locus of personal control.

It was mentioned earlier in this paper that an internal orientation on locus of personal control is defined as a composite construct of three personality factors: high self-esteem, favorable role-expectation, and a sense of self-adequacy. These factors have also been shown to stimulate risk-taking. Bem (1971), for example, connects high self-esteem to motivation and motivation to risk-taking. Atkinson & Feather (1966) review literature which advocates that persons with high self-esteem are, contrary to popular belief, moderate, not high risk-takers; i.e., they do not take wild, frivolous risks, like to be in control, and prefer to depend on skill. I would also argue that high self-esteem, because of its relationship to motivation, probably engenders a strong determination to overcome barriers and therefore leads an individual to take moderate risks (not extremely high or low risks), since the determination to succeed would encourage him or her to ponder the prospect of loss or failure in especially high or low risk-taking situations.

Of particular relevance to the findings in this study is Bem's (1971) argument which seems to support the explanatory power of risk-taking as a moderator variable in the observed relationship

between interlanguage development and internal orientation on locus of personal control. Bem claims that speaking best reflects self-esteem (an inherent characteristic of locus of personal control), "since speaking is an active skill which requires risking evaluation by others of the speaker's grammar, pronunciation, language facility" (p. 228).

The second personality factor comprising an internal orientation on locus of personal control, favorable role-expectation, implies an inner sense of security on the part of an individual to accept the aspirations and demands which are placed on him by others (Sue, 1981). I would also maintain that it is this sense of security that induces moderate risk-taking. Since risk-taking involves an outcome of a choice that could leave an individual in a worse position, an inner sense of security is necessary to rationalize and therefore cushion the possibility of failure (in the acquisitional context, failure to communicate effectively in the target language and the resilience to deal with possible negative evaluation by interlocutors).

Führer (1974) posits that individuals with a sense of self-adequacy (the third personality factor of an internal orientation on locus of personal control) are consistent, successful risk-takers. It would appear, then, that such individuals get satisfaction from targeting risky goals with a 50% approximate chance of success rather than goals fraught with wild, frivolous risks. It also seems reasonable to assume that a sense of self-adequacy would foster a propensity towards moderate risk-taking because individuals with this attribute believe that skill, not chance, leads to success.

Thus far I have attempted to offer a plausible explanation for the observed relationship between interlanguage development and internality on locus of personal control. The phenomenon of risk-taking was used to explain this relationship, and it appears to be a moderator variable induced by an internal orientation on the locus of personal control dimension, which is a characteristic of the more successful ESL students in this study. The speculation was also offered that such individuals, probably because of their willingness to take risks in communicating in a second language, thereby allowing input to become intake (to use Krashen's terms), may evidence a higher level of English proficiency than their counterparts with lower propensities for risk-taking.

This study showed that locus of responsibility did not correlate significantly with interlanguage development. Since locus of responsibility, in essence, measures the degree of responsibility or blame that an individual places either on self or on the system for

success/failure, this construct is dependent not only on an individual's sense of his or her place in the social structure but also on a sense of how much control s/he is able to negotiate with social and political circumstances in the system.

It is obviously the amount of negotiation that an individual is able to marshall within the social structure that enables her or him to decide whether success or failure is attributable to self or to the social system. Williams & Capizzi Snipper (1990) suggest that given the social, political, and cultural barriers inveighing against socioeconomic success for non-English-speaking minority immigrants--compounded by the incongruence of Euro-American cultural beliefs which place a high premium on uniqueness, independence, self-reliance, rugged individualism, and status achieved through one's own efforts--minority immigrants are likely to be confused as to whether the source of success and failure is attributable to themselves or to the social system. Thus, locus of responsibility, when applied to adult ESL students of low socioeconomic status, presents a picture that is contradictory and obfuscating and probably cannot be used to predict success or failure in language performance. Internal orientation on locus of responsibility as registered by some of the subjects in the study, may have been the result of internalized Western cultural beliefs about internal control rather than a social-psychological construct developed from concrete personal experiences.

CONCLUSION

At the core of the research findings in this study is the realization that an internal locus of personal control is equated not only with successful SLA but also with self-esteem, confidence, self-definition, and the propensity for risk-taking. The need to develop and foster an internal locus of personal control among adult ESL students of lower socioeconomic status is thus a priority because their experiences so often orient them in the opposite direction. Advocacy for a pedagogical model which empowers ESL students in ABE classes is therefore highly recommended. Such a model should provide for genuine dialogue between student and teacher in both oral and written modalities, negotiation, facilitation (rather than control) of student learning by teacher, and the encouragement of student/student talk in a collaborative learning context. Trueba (1989) calls for an emphasis on language which

builds on issues relevant to students' lives, which encourages active dialogue in the classroom, and which helps students develop a critical view of their lives, as well as calling for tasks to be presented to students in ways that generate intrinsic rather than extrinsic motivation.

Consistent with these tenets is the imperative to move from ESL materials that teach only the language of survival, of expressing an opinion or purpose, of following orders, of apologizing, of talking about the weather, and of asking for food items in a supermarket to ESL materials that teach the language of tenants' rights, of complaining, of filing grievances, of organizing a union, and of getting an association to defend one's rights. Auerbach (1991) proposes that teachers discuss with their ABE ESL students how to reshape the current curriculum so as to include a critical analysis of immigrant roles in the U.S. economy and the labor market and of the reasons for these students' linguistic and cultural exclusion from the establishment, thus making the debate about the ESL curriculum part of the ESL curriculum itself. She also argues that the philosophy of empowerment for ABE ESL students entails a move from a pedagogy of assimilative ESL to a pedagogy of critical ESL. English in ABE ESL classes can thus be a tool to establish active dialogue and encourage students to develop a critical view of their lives.

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NOTES

1 I am grateful to A. Wolfgang and D. Weiss for allowing me to use their unpublished scale for this study. Requests for copies of the WWILOC Scale (in Spanish and/or English) should be sent to Arlene Clachar, Department of Languages and Literature, Inter-American University of Puerto Rico, Call Box 5100, San Germán, Puerto Rico 00683.

2 Words such as "always" and "sometimes" were used on the questionnaire since it is difficult for respondents to quantify precisely the amount of English they use on the job.

3 Note that a lower score on the WWILOC Scales representing a more internal control orientation was hypothesized to correlate with a higher score on language performance. Thus, negative correlations were found for the LOC dimensions and language performance.

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APPENDIX

Wolfgang & Weiss Interpersonal Locus of Control (WWILOC) Scale

INSTRUCTIONS

These statements reflect the way people feel or react in social situations which are considered important in their lives. Try to respond to each statement carefully and honestly. Circle the response "a" or "b" which you think applies to you. Do not go back to the statements you have already responded to and do not spend too much time on each statement.

1. a. However much I try, people are usually not satisfied with my work.
   b. If people are not satisfied with my work, it is because I do not know how to better my relationships with people.

2. a. To get on well with people you need to be pleasant.
   b. It is difficult to know whether people really like you or not.

3. a. Many times I feel that to a great extent, successful relationships with people do not depend on me.
   b. It is impossible for me to believe that luck or chance has anything to do with my successful relationships with people.

4. a. What happens in my dealings with others depends entirely on me.
   b. Generally, I feel that I do not have sufficient control over the way things turn out between myself and others.

5. a. In the long run, I get the respect that I deserve regardless of the language I am speaking.
   b. Unfortunately, Americans often do not recognize my worth as a person, in spite of my effort to speak English.

6. a. When I plan ahead how I am going to improve my relationships with people, I am almost certain that everything will go well.
   b. It is not always intelligent to plan ahead how to improve your relationships with people, because in many cases, things happen as a result of good or bad luck.

7. Most times when you have difficulty understanding something that an American said to you, it is:
   a. because you did not pay enough attention.
   b. because the person did not explain clearly.

8. Suppose Americans think that you are not very intelligent or alert:
   a. If you make an effort, you can make them change their opinion of you.
   b. Whatever happens, they will always think that you are not intelligent.

9. If someone tells you that "your work is good," it is:
   a. because you did a good job.
   b. something you are usually told in order to encourage you.

10. Suppose you answered a question that you were not sure of, but it happened that your answer was correct. This probably happened:
    a. because you gave the best answer that you thought of.
    b. because the person who asked the question was not as clear as usual.

11. If someone tells you that you are acting immature and stupid and that you are not reasoning clearly, it is probably:
    a. because of something you did, or
    b. because people just like to complain.

12. Generally when you do not get on well with someone, it is:
    a. because of something you did, or
    b. because the person likes to argue.

13. When someone does not understand you, it is:
    a. because you are not explaining yourself clearly.
    b. because the person is not very intelligent.

14. a. Even though I am under no obligation, I sometimes find myself doing things that I really do not want to do.
    b. Generally, I do just what I want to do.

15. a. There are very few things in the English-speaking world that influence what I do; generally I do what I decide to do.
    b. Americans do have a great deal of influence on me.

16. a. I have noticed that sometimes when I am in the presence of some people, I do things without thinking, things I am sure I would not normally do.
     b. I think that I am able to control my behavior regardless of whom I am with.

17. a. Sometimes when I deal with Americans, my behavior can be very different from the usual.
     b. It would be very difficult for me to change my usual behavior when I am dealing with Americans.

18. a. What happens to a person when dealing with others is always due to his/her own actions.
     b. Very often, it is believed that what happens to a person in his/her dealings with others has nothing to do with what that person does. It is destiny.

19. a. Generally speaking, no one influences my behavior, regardless of whether the person speaks in English or not.
     b. Whenever I have to speak in English, I frequently feel that Americans are controlling my behavior.

20. a. I often realize that regardless of how hard I tried, destiny had planned some of the things that happened to me in my relationships with other people.
     b. The success and failures that I have had in my relationships with other people have been due to my own actions.

21. If I feel uncomfortable with Americans, it is:
     a. because Americans are not very kind to me.
     b. because I have not tried to be pleasant with them.

INSTRUCTIONS

These questions have no right or wrong answers. Please indicate if you agree or disagree with each question. If you agree, circle "YES"; if you disagree, circle "NO."

Answer the questions and give only one answer to each question. Do not go back to the questions that you have already answered.

22. Do you believe that your behavior has any effect on Americans?
     YES   NO

23. Do you think it is almost impossible to make Americans change their opinions of something?
     YES   NO

24.   Do you believe that when Americans are not nice to
        you they usually have good reasons for being so?
        YES   NO

25.   Do you think that when you do not get along well with
        Americans, there is very little you can do to change
        the situation?
        YES   NO

26.   Do you often feel confused about the way Americans
        behave towards you?
        YES   NO

27.   Do you think that you exercise a great deal of influence
        over what happens to you when you are with
        Americans?
        YES   NO

28.   Do you think that when you are successful in your
        relationships with people, it is because they have
        tried to be nice to you, and not because you have
        made a special effort to be nice to them?
        YES   NO

29.   Whenever you have to speak in English, do you
        frequently feel that Americans are manipulating your
        behavior?
        YES   NO

30.   Do you think it is your responsibility to pay attention
        to the effects that your behavior may have on
        Americans when you speak in English?
        YES   NO

31.   Some people believe:
        a. that Americans try to manipulate their behavior.

        Other people believe:
        b. that they themselves are able to control their own lives as they
            wish, independently of the language they speak.

        What is your opinion?
        Circle "a" or "b."

THE DEVELOPMENT OF SPEAKING/WRITING VARIABILITY IN NARRATIVES OF NON-NATIVE ENGLISH SPEAKERS[1]

Laurie Ann Haynes

This study investigates target language variability between speaking and writing in the second language acquisition of non-native English speakers. Spoken and written narratives from three groups of non-native English speakers, representing three levels of English proficiency, are analyzed and compared to the spoken and written narratives of native English speakers.

Eleven linguistic features, representing three dimensions of the oral/literate continuum, are examined with the multi-feature/multi-dimensional approach developed by Biber (1986). Results indicate that as narrators advance in English proficiency, they develop more abstract content and more reported style in both speech and writing. Conversely, both speech and writing become more interactive as speakers develop in English proficiency. Results indicating variability between spoken and written narratives show that non-native speakers develop systematically toward native English variability between speaking and writing.

INTRODUCTION

Little interlanguage research investigates the ways in which non-native speakers vary their discourse to accommodate different contexts. This type of discourse *variabilility* is usually studied by sociolinguists. Previous studies into non-native speaker interlanguage are dominated by a focus on the variation between correct vs. incorrect target language forms (Tarone, 1985, 1988; Tarone & Parrish, 1988; Schachter, 1986; Ellis, 1986, 1987; Ellis & Roberts, 1987; Preston, 1989). We must distinguish between these studies of interlanguage *variation* and the study of target language *variability* in the discourse of non-native speakers, which is the topic of this paper. While each type of study investigates non-native speaker interlanguage, studies of *variation* focus on correct versus

incorrect target language forms; studies of *variability* focus on discourse that is inherently variable in the target language, that is, discourse that varies depending upon the context in which it is produced.[2] In this study I focus on discourse variability which is standard in the target language and on how non-native speakers acquire and develop this variability. While little empirical evidence about this sort of interlanguage discourse variability and its development is available, studies into interlanguage variation illuminate some aspects of this topic.

In one study, Tarone (1985) finds that non-native speakers' attention to form (careful attention in a written test and more relaxed attention in a narrative) influences interlanguage variability. In another study, Schachter (1986) examines the functions of four forms of negation in one non-native speaker's usage and finds a "surprising regularity in his pairing of forms and functions, with a strong tendency to associate with each function a very limited set of syntactic forms and to associate with each syntactic form a very limited set of functions" (p. 131). Ellis (1987) finds that "the influence of the target language seems to be most apparent in planned discourse where there is opportunity to attend to form" (p. 14). These conclusions support the ideas that target language contextual variability is acquired along with the target language itself and that planned discourse elicits interlanguage which is more like the target language than does unplanned discourse.

Sociolinguists have established that speakers use different linguistic variables for different discourse contexts (Labov, 1972; Kroch & Small, 1978; Trudgill, 1975). Specifically, linguistic choices are determined by the context of the discourse interaction, that is, factors such as the relationship between speaker and addressee or the type of discourse (formal or casual, spoken or written, etc.). Other factors that determine linguistic choices are the speaker's age, race, sex, socio-economic status, and education level. Thus, that speakers use different linguistic resources for different contexts means that they have the ability to appropriately vary their linguistic choices to fit the context. This *variability* between discourse contexts (specifically the variability between speaking and writing) is studied here, with the assumption that non-native speakers, as well as native speakers, vary their linguistic choices according to discourse context.

In order to study variability between contexts, the contexts must be controlled and research into these contexts well-established. Discourse analysis research provides many studies that describe the relationship between speaking and writing (Chafe, 1982; Tannen,

1982, 1984; Beaman, 1984; Chafe & Tannen, 1987; Biber, 1988) as well as the characteristics of the narrative genre (Labov & Waletzky, 1967; Labov, 1972).

The studies of speaking and writing focus on such aspects as the degree of complexity, explicitness, planning, and involvement inherent in spoken and written discourse. Many of these studies focus on the narrative genre (Tannen, 1982, 1984; Beaman, 1984); Tannen (1982) argues that written narrative combines the involvement of speech with the integration of writing. From these aspects of speaking and writing, Chafe (1982) introduces the concept of discourse dimensions. Biber (1986, 1988) develops this idea of discourse dimensions by identifying three dimensions in English discourse: (1) interactive versus edited text, (2) abstract versus situated content, and (3) reported versus immediate style. The present study uses Biber's method of analysis, and consequently it is discussed in detail below.

In Biber's (1988, pp. 47-58) review of the literature into the relationship between speaking and writing, he finds six generalizations. Among these are that writing is

1. less personally involved than speech, and more detached and abstract than speech (Blankenship, 1974; Chafe, 1982; Chafe and Danielewicz, 1986);

2. more deliberately organized and planned than speech (Ochs, 1979; Rubin, 1980; Akinnaso, 1982; Brown and Yule, 1983; Gumperz, Kaltman & O'Connor, 1984).

However, Biber argues that these generalizations are not substantiated because they are based on studies in which discourse contexts have not been controlled.

In this study I control for discourse contexts by investigating only spoken and written narratives. I control for other contextual factors by eliciting data in the same way from students of similar ages in the same environment. Additionally, I control for target language variability by comparing the spoken and written narratives of native speakers to those of non-native speakers. None of the interlanguage studies discussed above account for target language variability, nor do they control for the target language accuracy against which they measure interlanguage variation. But Wolfson (1982) stresses that researchers of language acquisition must compare non-native discourse to native discourse in order to analyze non-native discourse accurately.

METHODS

This section describes the subjects who participated in the study, the data elicited from these subjects, and how the results of Biber's dimensional analysis are used to evaluate this data.

Subjects

Data from three groups of non-native English speakers were collected and compared to similar data from native English speakers, who served as a control group for this study.

Non-Native English Speakers

Three levels of non-native English speakers were used in this study. These levels represent three separate interlanguage systems as well as three levels of English proficiency--beginning, intermediate, and advanced. None of these subjects were raised in the United States. Once these groups were established, volunteers from each group were used as subjects. A total of 64 non-native speakers participated by speaking and/or writing English narratives.

Beginning level: Beginning non-native English speakers came from English-as-a-second-language (ESL) classes sponsored by the city of College Station, Texas. Many of these students were spouses of students and professors at Texas A&M University, who had lived in the United States for less than three months.

Intermediate level: Intermediate non-native English speakers came from the English Language Institute (ELI) at Texas A&M University. These students had TOEFL scores of 550 or higher, but they had not passed the oral and/or written English proficiency tests required before being allowed to take a regular university courseload.

Advanced level: Advanced non-native English speakers came from international classes of freshman English composition at Texas A&M University. These students had passed the oral and written English proficiency tests required for taking a regular university courseload.

Native English Speakers

The native English speakers were enrolled in freshman English composition classes at Texas A&M University. All of these subjects were raised in the United States. A total of 23 native speakers participated.

Narrative Data

The narrative genre was chosen for this study because a broad base of previous research concerns narratives (Labov & Waletzky, 1967; Labov, 1972; Tannen, 1982, 1984), and so the genre is well-defined. Some of this research concerns spoken and written narratives (Tannen, 1982, 1984). In addition to this base of research, narratives are not only relatively easy to elicit, they are a good indicator of language proficiency because the genre itself is relatively transparent; that is, almost all of my subjects had a story to tell and were comfortable telling it.

Since both spoken and written narratives were collected from each subject, the corpus totals 164 narratives. All spoken narratives were elicited under similar circumstances (in a small room with me and a tape recorder as audience) and by the same prompt: What was your most frightening experience? Labov (1972) points out that this prompt is likely to yield relatively unselfconscious, fluent speech. The spoken narratives elicited were usually between one and three minutes in length.

When they told their spoken narratives, the subjects did not know that written narratives would later be asked for. Written narratives were collected 2-3 weeks after the spoken narratives. Subjects were directed to write down the same experience they had told the researcher before, so the spoken and written narratives from any one subject are on the same topic. This method of collecting comparable spoken and written narratives was first used by Tannen (1982).

Eight categories of narratives thus form the data for analysis. The number following each category represents the number of narratives included in that category:

1. spoken non-native speaker--beginning (21)
2. spoken non-native speaker--intermediate (22)
3. spoken non-native speaker--advanced (21)
4. spoken native speaker (20)
5. written non-native speaker--beginning (20)
6. written non-native speaker--intermediate (17)
7. written non-native speaker--advanced (20)
8. written native speaker (23)

The number of texts differ within subject groups because some students who participated in the elicitation of spoken narratives were not available to provide written narratives, and vice versa for the native speakers.

Application of Biber's Analysis to the Present Study

Biber (1986, 1988) developed a quantitative method of textual analysis that he calls "multi-feature/multi-dimensional analysis." He used this method, which involves factor analysis, to correlate 41 linguistic features with functional dimensions in discourse. Through statistical analysis, he developed three primary discourse dimensions to describe a total of 587 texts (1986, p. 392). Biber began (and ended) his analysis with no assumptions about overall similarities or differences between speaking and writing. His is the only objective quantitative study of the differences between speaking and writing; since he did find discernable differences between speaking and writing, these constitute a reproducible measure of the variability between speaking and writing contexts.

In the present study, I use the results Biber obtained from his analysis to describe the variability between speech and writing in narratives produced by non-native and native English speakers. I base my analysis on the three discourse dimensions described in Biber (1986). Biber's 1988 study is an expansion of his 1986 work; he extended his discourse dimensions to six and based these dimensions on 67 linguistic features, 26 more features than the 1986 study. Overall, however, Biber (1988) concludes that

> the major aspects of the 1986 dimensions are replicated and confirmed by the present [1988] analysis. Specifically, in both analyses there are three major dimensions that mark (1) interactive, involved discourse versus edited, informational discourse; (2) formal, abstract information versus non-abstract

types of information; and (3) reported, narrative discourse
versus non-narrative types of discourse. (p.119)

Thus, since the fundamental results of the 1986 study were
replicated in the 1988 study, my analysis focuses on Biber's 1986
findings.   Because I examine only 11 of Biber's original 41
linguistic features, Biber's 1986 dimensions are scaled more closely
to the scope of my analysis than is his 1988 study of 67 features.
Analyzing 11 features in the present study is justified by the similar
results of Biber's two studies. In the following subsections, the
basis of Biber's analysis is described, which involves selection of
features and text corpora, factor analysis, and determination of
dimensions. After describing Biber's analysis and results, I will
explain how these results were used for the analysis of my narrative
data.

Selection of Features

Biber selected linguistic features for analysis based on
previous research into the differences between speaking and writing.
His 1986 results were based on 41 linguistic features, such as
yes/no questions, contractions, nominalizations, and adjectives.
Even though Biber used features that had discourse functions
previously associated with them, he did not assume that these
previously described functions were valid. Only through factor
analysis and subsequent dimensional analysis of the frequency of
the features occurring in a substantial text corpus did he assign
discourse functions to the features he examined.

Text Corpora

Biber (1986) used two separate corpora for his text samples.
Together these corpora included 587 text samples, comprising one
and one-half million words and 16 major text types.   Biber
examined all of these texts with respect to the 41 features; his is by
far the most broadly based quantitative study ever accomplished in
the investigation of the relationship between speaking and writing.

Factor Analysis

Biber (1988) used factor analysis as "the primary statistical
tool of the multi-feature/multi-dimensional approach to textual
variation" (p. 79). In this analysis, frequency counts of linguistic

features occurring in the texts of the corpora were used to identify sets of features that co-occur within these texts; thus Biber (1988) assumed "that frequently co-occurring linguistic features have at least one shared communicative function" (p. 63). The frequent co-occurrence of a group of linguistic features in texts thus indicated some underlying function that those features share. From this assumption, Biber then used these sets of co-occurring features to determine a functional discourse dimension underlying each set.

In addition, factor analysis yielded values of factor loading for each feature; that is, each feature which helped make up the set of features constituting one factor has a factor-loading value. Higher factor-loading values indicate that features "are better representatives of the dimension underlying the factor" (Biber, 1988, p. 81).

Determination of Dimensions

Dimensions are distinguished from *factors* in that a dimension represents the underlying function or relationship between a set of features; a factor is merely the set of co-occurring features. Dimensions, then, are factors that have been interpreted. Biber (1988) states that dimensions have three distinctive characteristics: (a) no single dimension will be adequate in itself to account for the range of linguistic variation in language; rather, a multi-dimensional analysis is required; (b) dimensions are continuous scales of variation rather than dichotomous poles; and (c) the co-occurrence patterns underlying dimensions are identified empirically rather than proposed on an a priori functional basis (p. 24).

By examining the relationships among the features within each factor and between these features and the texts in which they originate, Biber ascribed a functional discourse dimension to each factor (or set of co-occurring features). Thus, from the factor analysis and examination of the textual relationships of features, three discourse dimensions are used in my study:

  1. edited versus interactive text

      Edited text is concise, possibly indicating more planning than interactive text. Features that indicate interaction are "characterized as verbal, interactional, affective, fragmented, reduced in

form, and generalized in content" (Biber, 1988, 105).

2. abstract versus situated content

Abstract discourse focuses on ideas or thoughts and is "semantically complex"; often the "active agentive participant" is lost, and this results in the "promotion of a more abstract concept" (Biber, 1986, 395). Situated discourse refers "directly to an external situation" and is more concrete than than abstract discourse (Biber, 1986, 396).

3. reported versus immediate style

Reported discourse refers to a removed situation and is narrative in nature. Immediate discourse has little reference to a removed situation.

I applied Biber's results, the defined dimensions of discourse, to the present study by assuming that these primary dimensions are valid for English discourse. I then selected a group of 11 features to represent the three dimensions. The linguistic features chosen exhibit high factor loadings for each dimension; that is, the features analyzed here are the strongest representatives of the dimensions underlying the factors. (They were also the most practical features to analyze for the narrative genre, as some features representing the dimensions, such as yes/no questions, were unlikely to occur in narratives.) The features analyzed, according to the dimensions they represent, were as follows:

Dimension 1: edited versus interactive text

1. pro-verb *do* (indicates interactive text)
2. pronoun *it* (indicates interactive text)
3. general hedges (indicate interactive text)
4. *that* clauses (indicate interactive text)

Dimension 2: abstract versus situated content

     5. nominalizations (indicate abstract content)
     6. prepositions (indicate abstract content)
     7. place adverbs (indicate situated content)
     8. time adverbs (indicate situated content)

Dimension 3: reported versus immediate style

     9. past tense (indicates reported style)
   10. third-person pronouns (indicate reported style)
   11. present tense (indicates immediate style)

By analyzing my narrative data with respect to these features, I determined patterns for non-native and native English speaker variability between spoken and written discourse. Since Biber defined these dimensions of discourse to contain the features described above, I was able to apply my narrative data to these dimensions to see how these dimensions describe my eight narrative types. I compared the dimensional descriptions to see if a systematic pattern could be observed from the interlanguage system of the beginning non-native speakers to the target language system of native speakers. In other words, these dimensional descriptions allowed me to determine the variability between the spoken and written discourse of one interlanguage system; for instance, variability between beginning non-native speakers' spoken and written discourse could be quantified and compared to this variability in the other levels. To accomplish this, factor values were calculated first for each narrative and them for each narrative type. Factor values were determined by counting the features in each narrative. This procedure is detailed below.

Determination of Factor Values

For each narrative: The sum of the number of features within each factor determined the three factor values for each narrative. dimensions are equivalent to factors in this study, since dimensions are factors which Biber interpreted.[3] Example 1 shows the numbers of each feature and the factor values for a beginning non-native speaker spoken narrative. The features for Dimension 1 (edited versus interactive text) are italicized in the narrative. This narrative contains one *that* clause, one pro-verb do, one pronoun it, and two general hedges; all of these features indicate interaction, so

the number of features are merely added together, and the factor value for Dimension 1 is 5, as shown. The features for Dimension 2 (abstract versus situated content) are underlined in the narrative. This narrative contains no nominalizations, 12 prepositions, so place adverbs, and three time adverbs; since nominalizations and prepositions indicate abstract content, and place and time adverbs indicate situated content, the three time adverbs must be subtracted from the 12 prepositions. The factor value for Dimension 2 is therefore 9. The features for Dimension 3 (reported versus immediate style) are in boldface in the narrative. This narrative contains 12 past tense verbs and 15 third-person pronouns; these features indicate reported style. This narrative also contains eight present tense verbs, which indicate immediate style, so these eight present tense verbs must be subtracted from the sum of 12 past tense verbs and 15 third-person pronouns. The factor value for Dimension 3 is thus 19, as shown.

In determining factor scores for this narrative, as well as for all the others, I did not count features that were repeated together or which were produced when the subject seemed to be stuttering; so in line 3 of Example 1, for instance, although the subject says he came twice, I only counted on third-person pronoun (he) and one past tense verb (came). I counted features in this way to avoid false factor values. In this narrative alone, there are none repeated phrases (lines 3, 9, 10, 11, 12, 12-13, 13, 13-14, 15). I also deleted anything I said during the narrative.[4]

Example 1: Beginning NNS Spoken Narrative

1 my mas most frightening history **was** when
2 my father **crashed** <u>with</u> another car and this **was** um 1946
3 uh *more or less* one week <u>before</u> **he came** he came <u>to</u> to my
    country
4 because **he was** traveling <u>around</u> the Europe and
5 this **was** <u>in</u> December 25
6 one car **came** <u>to</u> the other place and **take** a curve
7 and my father **was** driving **his** car and
8 and crash and and my father **broke his** leg
9 but the Red Cross **came** <u>for</u> **him** <u>after</u> two hours after two
    hours and **they**
10 they **suffer** very much because **they can** they can they
    couldn't move
11 because he **he had his** leg broke
12 and since the crash <u>until now</u> **he can't** walk

13 can't walk very good because uh his **his** leg **is** not good
14 *its* not good <u>until now</u> and *maybe*
15 **he needs** <u>to</u> he needs another surgery but <u>now</u> **he's** traveling
    <u>in</u> Spain
16 because **he *doesn't*** know *that **he needs** another another*
    surgery
17 that's all

Factor 1	Factor <u>2</u>	**Factor 3**
1 *that* clause	0 nominalizations	12 past verbs
1 *do* pro-verb	12 prepositions	<u>+15 third per.pro.</u>
1 *it* pronoun	0 place adverbs	27
<u>+2 general hedges</u>	<u>- 3 time adverbs</u>	<u>- 8 present verbs</u>
5 = Factor 1 value	9 = Factor 2 value	19 = Factor 3 value

For each narrative type: Once the dimension values for each narrative were determined, mean dimension values for each narrative type were calculated. This calculation involved eight steps. The following example calculations are for Dimension 1 for the beginning non-native speaker written narrative type:

1. Determine sum of all Dimension 1 values.

> My corpus contains five beginning non-native speaker written narratives. Dimension 1 values for these five narratives are 7, 0, 2, 2, and 0. I added these values to get a sum of 11:

> $7+0+2+2+0 = 11$ = sum of Dimension 1 values

2. Determine mean Dimension 1 value.

> I divided 11 by the number of beginning non-native speaker written narratives, 5:

> $11/5 = 2.2$ = mean Dimension 1 value

Because not all of the sets of narratives were the same length (native speakers write more than non-native speakers, for example), it would be misleading simply to compare average numbers of times a set of features occurred. The scores were therefore normalized so

they can be compared to Dimension 1 values for other narrative types. The remaining steps show this process:

3. Find the sum of the lengths of narratives in the narrative type.

> The sum of the lengths of the five beginning non-native speaker written narratives is 658 words.

4. Determine the mean narrative length.

> I divided 658 by the number of narratives, 5:

> 658/5 = 132 words = mean narrative length

5. Find the longest mean length of the eight narrative types.

> The mean length of the longest narrative type is 445 words.

6. Calculate normalization value for the narrative type.

> For the beginning non-native speaker written narrative type, the normalization value is calculated by dividing 445 words, the length of the longest narrative, by 132 words, the mean beginning non-native speaker written narrative length:

> 445/132 = 3.37 = normalization value

7. Determine the normalized mean dimension value for the narrative type.

> This value is determined for the beginning non-native speaker written narrative type by multiplying the normalization value for this narrative type, 3.37, by the mean Dimension 1 value for this narrative type, 2.2:

> (3.37) x (2.2) = 7.4

8. Round the normalized mean dimension value to the nearest whole number:

> 7.4 rounds down to 7 = normalized mean
> Dimension 1 value

The normalized mean dimension values for each narrative type were then compared to determine the results of this study.

RESULTS

Interactive versus Edited Text

Figure 1 shows the distribution of narrative types for Dimension 1, interactive versus edited text. The units in Figure 1 are the mean normalized number of features indicating interaction. Figure 1 shows that, in general, speaking is more interactive than writing for both native and non-native speakers. All spoken narrative types, except the beginning non-native spoken narratives, tend toward the interactive end of the scale, while all written narrative types tend toward the edited end of the scale.

Further, the distribution in Figure 1 suggests that subjects who are more proficient in English tend toward interactive discourse in both speaking and writing. This trend is most pronounced for the spoken narrative types; beginning non-native spoken narratives are the least interactive (at 13) of all the spoken narrative types, while intermediate non-native spoken narratives (at 20) are more interactive. Advanced non-native and native English spoken narratives (at 34 and 36, respectively) are much more interactive than both beginning and intermediate non-native narratives.
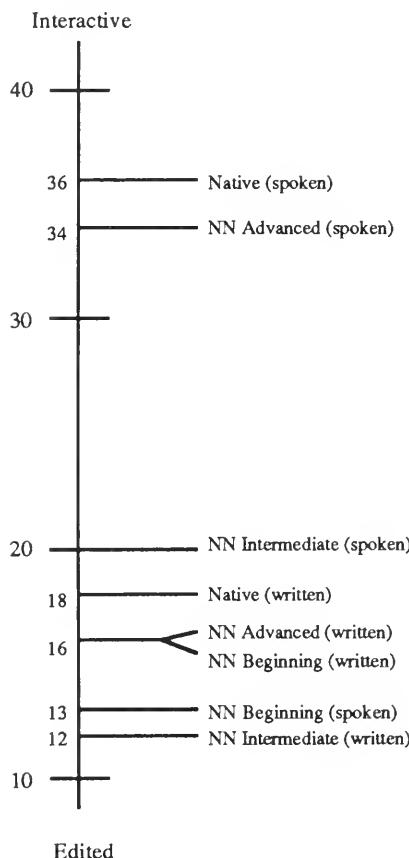
Figure 1: Dimension 1: Interactive versus edited text

The written narratives exhibit a similar interactive trend, although it is much less pronounced and more ambiguous than the trend of the spoken narratives. Clearly, the native English written narratives (at 18) are the most interactive of the written narratives. Advanced and beginning non-native written narratives (both at 16) follow the native English written narratives in interaction, while intermediate non-native written narratives (at 12) are the least interactive of all the narrative types.

Abstract

```
50 ─────┼─────

   47  ├──────────────  NN Advanced (spoken)

   45  ├──────────────  Native (written)
   44  ├──────────────  Native (spoken)
                        NN Intermediate (written)
   43  ├──────────────
                        NN Advanced (written)

40 ─────┼─────

   34  ├──────────────  NN Beginning (written)

   31  ├──────────────  NN Intermediate (spoken)
30 ─────┼─────

   25  ├──────────────  NN Beginning (spoken)

20 ─────┼─────
```
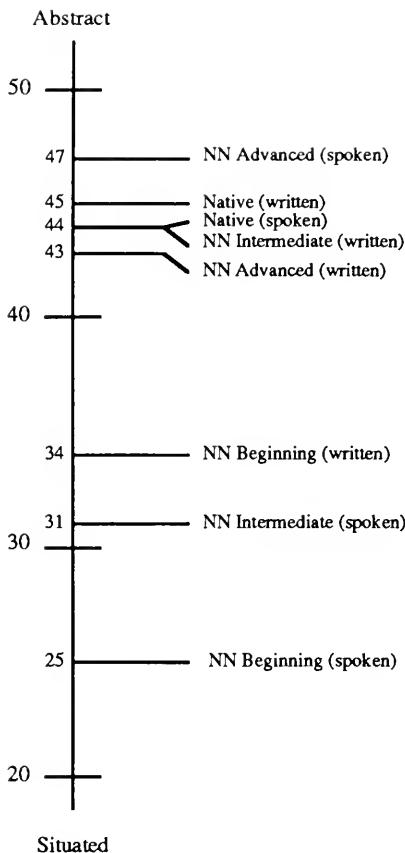
Situated

Figure 2: Dimension 2: Abstract versus situated content

Abstract versus Situated Content

Figure 2 shows the distribution of narrative types for Dimension 2, abstract versus situated content. The units in Figure 2 are the mean normalized number of features that indicate abstraction less the mean normalized number of features that indicate situation. As Figure 2 shows, the distribution of narrative types for Dimension 2 does not indicate any clear separation between speaking and writing the way the distribution for Dimension 1 does.

The Dimension 2 distribution in Figure 2 does show, however, that subjects who are more proficient in English tend toward abstract discourse in both speaking and writing. Again, this trend is most pronounced for the spoken narrative types; beginning non-native spoken narratives (at 25) are the least abstract of all the spoken narrative types, while intermediate non-native spoken narratives (at 31) are more abstract. Native English and advanced non-native spoken narratives (at 44 and 47, respectively) are the most abstract of the spoken narratives.

The written narrative types exhibit a similar trend, although this is indicated most decisively only by the large gap between beginning non-native written narratives (at 34) and the other three narrative types; advanced non-native written narratives (at 43), intermediate non-native written narratives (at 44), and native English written narratives (at 45).

Reported versus Immediate Style

Figure 3 shows the distribution of narrative types for Dimension 3, reported versus immediate style. The units in Figure 3 are the mean normalized number of features that indicate reported style less the mean normalized number of features that indicate immediate style. Figure 3, like Figure 2, shows no clear separation of spoken and written discourse as evidenced by the distribution of narrative types for Dimension 3.

Spoken narrative types, as seen in Figure 3, tend to be more reported than immediate in style as subjects advance in English proficiency; beginning and intermediate spoken narratives (at 20 and 12, respectively) are much less reported in style than are advanced non-native and native English spoken narratives (at 64 and 70, respectively).

Written narratives for this dimension are difficult to characterize. No trend or pattern is evident, as intermediate and advanced non-native written narratives (at 50 and 53, respectively) are less reported in style than are beginning non-native and native English written narratives (at 70 and 60, respectively).

The distribution range of narrative types for Dimension 3 is much broader than that for Dimensions 1 and 2; the difference between the most reported and the most immediate narrative types equals 58 factor values for Dimension 3, while the factor value ranges for Dimensions 1 and 2 are 24 and 22, respectively.
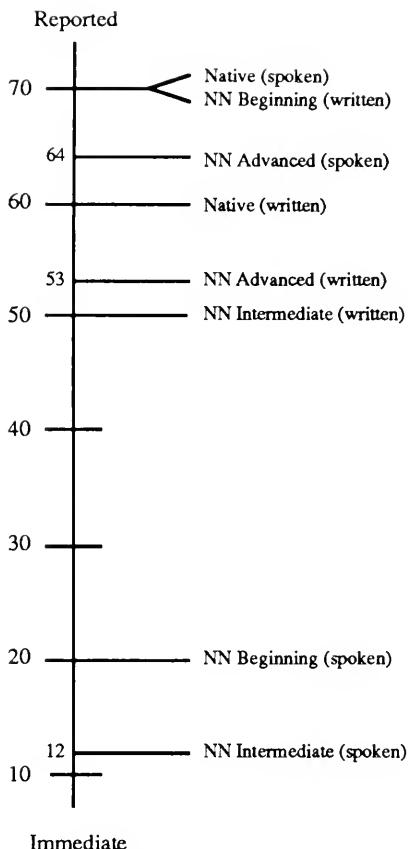
Reported

Figure 3: Dimension 3: Reported versus immediate style

Factor Value Differences between Spoken and Written Narratives

Figure 4 shows the factor value differences between spoken and written narratives for each subject group, or interlanguage system, as compared to the target language (native English) subject group. Factor value differences were calculated from the results of Figures 1-3 and are the differences between the spoken and written factor values for each interlanguage group (I subtracted the lower factor value from the higher factor value regardless of whether it was spoken or written). These factor value differences represent the *variability* between the spoken and written narratives.

Figure 4: Factor value differences between spoken and written narratives (B=beginning NN; I=intermediate NN; A=advanced NN; N=native)
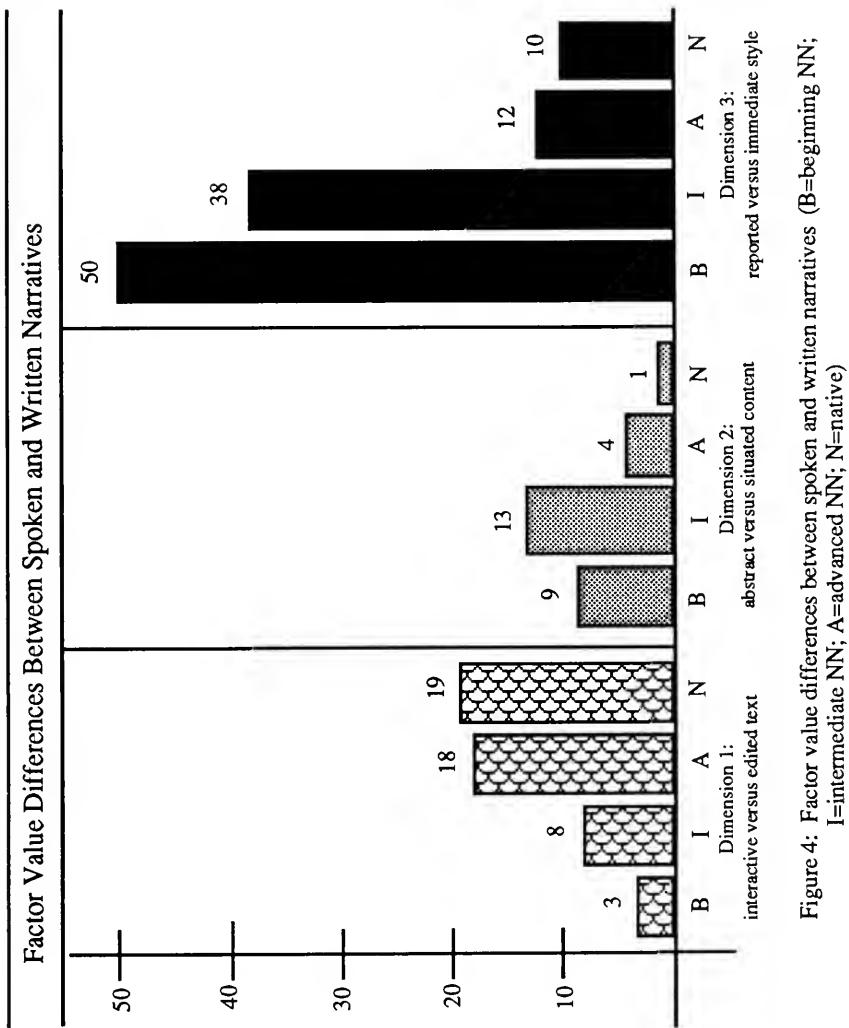
In each dimension, as shown in Figure 4, the three interlanguage systems (represented by B, I, and A) appear to progress toward the target language system (represented by N) in a systematic way. In Dimension 1, interactive versus edited text, variability between spoken and written narratives increases as English proficiency increases. Only three factor values separate beginning non-native spoken and written narratives, while eight factor values separate intermediate non-native spoken and written

narratives. Advanced non-native (at 18) and native English (at 19) spoken and written narratives show an obvious increase in variability in the beginning and intermediate groups. In Dimension 1, then, variability between speaking and writing increases with increasing English proficiency. This result was reflected in Figure 1, which showed a general separation between spoken and written narrative groups.

The pattern of factor value differences for Dimension 2, abstract versus situated content, is more ambiguous than the trend in Dimension 1; however, if we group the beginning (B) and intermediate (I) narratives, the results of Dimension 2 indicate a trend of *decreasing* variability accompanying increasing English proficiency. Beginning (at 9) and intermediate (at 13) non-native factor value differences are large compared to advanced non-native (at 4) and native (at 1) factor value differences. This grouping of beginning and intermediate narratives is consistent with the trends of Dimensions 1 and 3 in Figure 4; in these dimensions, the variabilities of beginning and intermediate narratives are distinct from the advanced and native narratives.

In Dimension 3, reported versus immediate style, variability between spoken and written narratives decreases with increasing English proficiency; this trend is similar to that of Dimension 2. Dimension 3 also shows great variability between the speaking and writing of beginning (at 50) and intermediate (at 38) non-native groups. Advanced non-native (at 11) and native English (at 10) groups show a much lower variability between spoken and written narratives.

CONCLUSIONS

Only Figure 1, representing the results for Dimension 1, interactive versus edited text, shows a clear separation between the spoken and written discourse of all language groups. Figures 2 and 3 show no clear separation between these two modes.

However, Figures 1-3 do indicate that as groups become more proficient in English, their spoken and written narrative discourse tends toward one end of each dimensional scale. Figure 1 shows a trend toward interactive discourse with increasing English proficiency, with speaking more interactive than writing. Figure 2 shows a trend toward abstract discourse with increasing English proficiency, with no clear separation between speaking and writing.

Figure 3 shows a trend toward reported spoken discourse (though no clear trend can be discerned for written discourse in this dimension).

These trends at once confirm and refute the generalizations about speaking and writing differences in recent literature. The assertion that writing is less personally involved than speech (Blankenship, 1974; Chafe, 1982; Chafe & Danielewicz, 1986) is supported by the results for Dimension 1, interactive versus edited text. Personal involvement and interaction are synonymous, so this study supports the generalization that writing is less personally involved than speaking. The assertion that writing is more abstract than speaking, however, is refuted by this study as both speaking and writing tend toward the abstract end of the scale in Dimension 2, abstract versus situated content. This result may reveal a characteristic of the narrative genre, however, and not of speaking and writing in general. Since narratives are by definition accounts of past experiences and are molded by the ideas the subject has about these experiences, narratives are unlikely to be situated and concrete in nature.

The results from Dimension 3, reported versus immediate style, also reflect a characteristic of the narrative genre, since most spoken and written discourse tended toward the reported end of the scale. Because narratives are typically reported events, this result is not surprising. An interesting aside, though, is that narratives contain present tense verbs (Labov & Waletzky, 1967), an immediate, not reported, linguistic feature in Biber's dimensions. However, when I recalculated the features for Dimension 3, reported versus immediate style, using the present tense as a feature indicating reported discourse instead of immediate, the results for Dimension 3, as well as for the overall variability shown in Figure 4, had the same patterns.

The results indicate, then, that the narrative genre is identifiable by Biber's method, further establishing the importance of Biber's quantitative work discerning speaking and writing. Perhaps the key to the differences between speaking and writing lies not so much in the differences between these contexts, but in the particular genre that is spoken or written, be that formal or casual discourse.

Figure 4 answers the primary question of this study: Do non-native English speakers learn English target language variability in a systematic way? In general, Figure 4 indicates that the answer to this question is *yes*; non-native speaker variability between speaking and writing tends toward native English speaker variability

with increasing English proficiency in each discourse dimension. The development of variability between spoken and written narratives in non-native narrators is systematic. An apparent leap in this development occurs between the intermediate and advanced non-native English interlanguage levels, as Figure 4 shows for each discourse dimension.

Overall, the results show that non-native written narratives are closer to native written narratives in text, style, and content than non-native spoken narratives are to native spoken narratives in all three dimensions. This finding suggests that the planning model to which Tarone (1985) adheres may be valid for describing how target language forms are incorporated into non-native English interlanguage systems. Non-native narrators have more time to plan written discourse and thus are not only more careful in producing written discourse, they are also able to incorporate more target language forms into written discourse than they do in spoken discourse. Spoken discourse, on the other hand, is less planned and more vernacular in style than written discourse is; therefore, non-native oral narrators cannot incorporate as many target language forms into their spoken narratives. A planning model also applies to speaking and writing in general; that is, writing is generalized to be more deliberately organized and planned than speech (Ochs, 1979; Rubin, 1980; Akinnaso, 1982; Brown & Yule, 1983; Gumperz et al., 1984).

The most basic implication of this study for overall second language acquisition theory and research is that non-native English discourse should be compared directly to native English discourse. In other words, if non-native speakers perform tasks (be they grammar tests, oral interviews, or others) to be analyzed in a study of second language acquisition, native English speakers should perform the same tasks under the same contextual conditions as the non-native speakers do. Non-native English performance may then be compared to native English performance directly, as was done in the present study. I focus on this methodological implication first because in my review of second language acquisition research, I found few studies that made direct native/non-native comparisons.

This kind of comparison is important because, while "correct" native English discourse may seem intuitively apparent, it often is not. For the present study, it would have been impossible to discuss meaningfully non-native English variability and development without some target language norms with which to compare these. It does not seem to be universally recognized that native English speakers vary their discourse for many reasons and

that many of these reasons are cultural in nature. Interlanguage systems vary, undoubtedly more than native systems do, but native variability must be recognized and accounted for so as not to misrepresent the nature of interlanguage variability. This native/non-native comparison is important, then, for both general discourse studies and specific studies of structural, grammatical, syntactic, or lexical features.

The above issue relates to the focus on target language accuracy that many second language acquisition researchers adopt when approaching data collected from non-native speakers. But accuracy should be judged according to native speaker language use and not intuitive predictions or even grammar-book-style correct and incorrect linguistic forms. With native speakers providing the target language norm for the study of interlanguage systems, interlanguages can be described with direct reference to an actual target language system. The results of the present study suggest that the intermediate interlanguage level is an especially fertile and complex area in which much further comparative study is needed. Many studies have focused on the intermediate interlanguage level (e.g., Tarone, 1985; Ellis, 1987; Tarone & Parrish, 1988), but there is a need for even more attention to specific linguistic features at this level to determine a natural order of acquisition for specific linguistic features, if such a natural order exists.

Finally, few studies of second language acquisition focus on target language variability instead of accuracy. Further study into different kinds of target language discourse variability, and not only speaking and writing variability, would be valuable. Different genres besides narratives could also be explored; since the narrative genre seems to be a "natural" one--we all tell stories--studies of "academic" genres, for example, might be informative for those interested in second language acquisition of communicative skills.

NOTES

2 Barbara Johnstone called my attention to the difference between these two terms.

3 An independent factor analysis was not performed for this study.

4 I transcribed spoken narratives by "breath groups," or utterances punctuated by breaths of the speaker. Each line of the example thus represents one breath group.

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The Effects of Linguistic Context on Unplanned Discourse: A Study in Interlanguage Variability

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 This study examines the variable realization of the third person singular -s by Shona learners of English at elementary and intermediate levels of proficiency. The study is unlike previous ones, not so much because it controls for differences in discourse mode but because it examines the effects of different linguistic contexts embedded in comparable discourse positions. The paper argues that although the performance of the subjects is elicited from unplanned discourse, different discourse segments might vary in terms of their degree of plannedness. The results demonstrate that very little morphological variability occurs in the production of elementary learners. The little variation exhibited is lexical. Some words attract target-language-like variants more frequently than others.

 The performance of the intermediate group shows that the distribution of grammatical variants is sensitive to linguistic context and that, contrary to expectations, second language learners are more likely to inflect verbs to mark the third person -s if the grammatical subject is realized, as opposed to when it is not.

INTRODUCTION

 This paper reports on a study into interlanguage (IL) variability and examines how the variability provides insight into the processes of language acquisition among Shona speakers of English.[1] This study is unlike previous research on IL variability for two main reasons. First, most of the research into IL variability has been carried out among subjects with an Asian or Indo-European background. In L. Dickerson (1975) the subjects were Japanese. In Ellis (1989) one of the subjects was Portuguese; the other two were Pakistani. Young's (1989) subjects are from mainland China. The subjects in the present study have Shona as a mother tongue. The aim of using learners coming from a language background which is typologically different from both Asian and Indo-European

languages is to add to IL studies of non-Indo-European and non-Asian language speakers and to investigate further how IL may vary.

Second, the subjects in this study are at two different levels of proficiency: elementary and intermediate. This paper argues that variability is likely to provide much insight into second language acquisition (SLA), if it is revealed to be a form of language behavior characteristic of learners at different stages of development. Level of proficiency as a potential determinant of IL variability has not been directly addressed in previous studies because learners were typically drawn from the same level of proficiency. In Ellis (1987) the subjects were at what he calls a low intermediate level of proficiency. The possible exception is Young (1989) who had two groups of subjects at different levels of proficiency.

Although the Ellis (1988) study provided evidence that the use of the third person singular is susceptible to linguistic context, his subjects were at the same level of proficiency, unlike the study reported in this paper. My study is also different from the Ellis study because it examines the effects of different linguistic contexts in one discourse mode. The Ellis study mixed data from interviews with the subjects conducted by the researcher and data produced by the subjects while talking among themselves.[2]

My study also goes further than previous research on one important dimension, by examining the effects of different linguistic contexts embedded in comparable discourse positions.   The narrative which each subject produced was broken down into three main discourse fragments (discourse initial, medial, and final) and the effects of different linguistic contexts in each discourse fragment were compared. For example, the effects of a pronoun subject + verb were compared with the effects of a pronoun subject + adverbial + verb on the suppliance of the third person -*s* morpheme in the discourse fragment in the initial part of the narrative.

This paper is divided into three main sections. The first part reviews some of the studies reporting the existence of variability in IL performance. The second part provides a description of the subjects participating in my study, the methods of data elicitation, and the modes of analysis employed. The final section reports on the findings of the analysis in the light of previous research.

Literature Review

Some studies attribute variability to task type and others to linguistic context. Those attributing variability to differences in task

type have problems in establishing how much attention each task demands, whereas those attributing it to linguistic context form no consensus on what constitutes the relevant context which induces variability.

When L. Dickerson (1975), W. Dickerson (1976), and Tarone (1979) argue that second language speech varies depending on the amount of attention paid to form, they have theoretically identified an important determinant of IL variability but have underestimated the problems of empirically operationalizing the concept. The common assumption made in all these studies is that different tasks elicit varying amounts of attention to form. For instance, a word-list reading task in L. Dickerson's study is expected to elicit more attention to form than dialogue reading. The least amount of attention to form is expected during free speech. Romaine (1984) argues convincingly that the attention to form each subject pays varies depending on the difficulty each subject has in reading. Thus, contrary to L. Dickerson's claims, a subject with relatively few reading problems is likely to pay less attention to form in word-list reading and more in dialogue reading. The view that free speech is produced with the least amount of attention to form has also been challenged. Rampton (1987) argues that second language learners exposed to the target language (TL) in a predominantly formal environment (such as was the case with L. Dickerson's subjects) may invest more attention to form in order to sound informal.

Labov (1969) and Ellis (1988), although both accepting that linguistic context plays an important role in producing variable performance in the use of structures such as the copula, disagree on what constitutes the relevant context. For instance, for Ellis the relevant linguistic context inducing variability in the use of the copula is whether the element preceding the copula is a noun phrase (NP) or a pronoun, whereas for Labov the context is much more elaborate, combining both phonological and syntactic environments. The differences in what constitutes the relevant linguistic context arises because of a post-hoc analysis of context (Surreys, 1990). Not only do these studies define context post-hoc, they do not examine the effects of discourse on linguistic context. For example, the same linguistic item may have different effects on grammatical accuracy depending on whether it is part of a rapid give-and-take segment or part of a long turn (Preston, 1989).

Another factor which has not been fully exploited as an important determinant of IL variability is the difference in levels of proficiency between subjects. In Ellis (1988) and Fairbanks (1983)

the subjects are of comparable proficiency. Thus, neither Fairbanks nor Ellis can examine the effect proficiency might have on IL variability. A possible exception is Young (1989), as the subjects in his experiment are at different levels of proficiency.

Andersen (1984, 1989) differs from the studies focusing on the effects of linguistic context and task type in IL variability. He accounts for variability by postulating the existence of Slobin-like cognitive principles. "The relevance principle," "the one-to-one principle," and "the frequency principle" are said to explain the acquisition of the three English *s*'s: possessive -*s*, third person singular -*s* and the plural -*s* morpheme.

As Andersen explains, the relevance principle, originating with Bybee (1985), predicts that the plural -*s* will be acquired earliest because it is the most relevant to the attached noun. The one-to-one principle promotes the use of the plural -*s* because the morpheme consistently entails more than one. The plural morpheme also tends to be much more frequent in the input than the possessive and the third person. The delay in the acquisition of the possessive morpheme may partially arise from its violation of the one-to-one principle because the sequence of possessor + possessed adequately captures the meaning which the possessive expresses. The relevance principle explains why of the three English *s*'s the third person is acquired last. The information in the third person is redundant because it is already encoded in the grammatical subject.

Andersen's work on morphological variability is particularly relevant to my study, since my study provides a test case for the relevance principle by examining the effects of null and pronominal subjects on verbal marking. If the relevance principle is applicable to the learners in this study, then we would expect the verbs to be inflected more frequently when the grammatical subject is null than when it is a pronoun. In the latter case the information encoded in the verb is already carried by the pronoun, which is not the case when the grammatical subject is ellipted.

The study reported here differs from the reviewed research in three ways. First, some of the previous research evidenced problems in determining how much attention to form was paid in different tasks. I avoided the problem by examining variability in one oral recall task. Second, because the same linguistic context may behave differently depending on the type of discourse and the position of the discourse fragment within that discourse, this study, unlike previous research, examined the effects of different linguistic contexts embedded in comparable discourse positions. Finally, to compare the impact of proficiency on variability, the performance of

two groups of learners at two different levels of proficiency was compared.

Defining Discourse Planning

Following Ochs (1979) two criteria for discourse planning were evoked: forethought and design. Discourse is unplanned when it lacks forethought, in other words, when it has not been thought out before expression. Discourse is also unplanned if the speaker has not established the overall design which the discourse will take. Because the speaker has not determined the design or "architecture" of the discourse, she cannot determine in advance the various linguistic ways in which the design will be realized. Ochs sees the distinction between unplanned and planned discourse as a continuum rather than as a dichotomy. Thus, different discourse types will exhibit differing degrees of planning.

The aim of my study was to elicit discourse responses which could be characterized as lying more towards the unplanned end of the planning continuum. The subjects' responses were unplanned because they heard a story which they had not heard before, their discourse thereby meeting the first criteria of unplanned discourse, lack of forethought. Because their discourse lacked forethought, they could not impose a design on it, fulfilling the second criteria of unplanned discourse, absence of a discourse design.

The advantage of using the construct of planning is that it partially overcomes some of the problems of determining the amount of attention being paid to linguistic form. It is however hypothesized that the more planning opportunities the speaker has, the greater the chances she will be able to attend to linguistic form. The construct of discourse planning is one of the potential ways of operationalizing the concept of attention to linguistic form.

Because the speaker's speech lacks forethought and the discourse lacks overall architectural discourse design, the learner is likely to spend a considerable amount of cognitive energy in trying to locate the necessary linguistic forms to express the content which she will be accessing from memory. The memory search for the information and ways of expressing the content inhibit attempts by the learner to attend to linguistic form.

Rationale for the Selection of the Third Person Singular

Studies by Fairbanks (1983) and Ellis (1988), among many others, have demonstrated that the third person singular is variable.

My reason for selecting the third person -*s* was to assess the extent to which variability was caused by one of the following three factors: (a) the level of proficiency of the subjects, (b) the linguistic context in which the linguistic form is situated, and (c) the type of verb. The study also sought to examine what insight, if any, was gained into language acquisition by studying IL variability.

METHOD

Subjects

The two groups participating in the study were at elementary and intermediate levels of proficiency. The levels of proficiency of the subjects of both groups was assessed on the basis of their performance on an adaptation of the British Council ELTS test, which is administered to overseas students intending to study in the U.K. The components of the ELTS test used to assess the level of proficiency of the subjects were an oral interview and a writing task.

The elementary subjects were in the fourth year of their primary school education. The medium of instruction in their first two years of primary education was Shona; thus the subjects were in the second year in which English was being used as a medium of instruction. The age of the subjects ranged from nine to eleven. There were fourteen subjects (N=14) in the elementary group.

There were sixteen subjects (N=16) in the intermediate group who were all in their second year of secondary education. The youngest member of the intermediate group was thirteen years old and the oldest was fifteen. The data from both groups was elicited towards the end of 1989.

The elementary and intermediate groups were all drawn from rural community schools in Zimbabwe, where the students' main exposure to English was restricted to the classroom, as opposed to their urban counterparts who were exposed to English both in and outside the classroom. There were thus two main reasons for selecting rural students. First, I was interested in examining variability in the production of second language learners whose exposure to English was restricted to the classroom. Second, because rural children's exposure to English was restricted, it was possible to capture learners who were at an elementary level of proficiency.

Data Elicitation

Following is a description of the task which was used to elicit the third person singular. The subjects were asked to listen carefully to a story based on a description of the habitual activities of two brothers, Peter and John (see Appendix for the story). The story describes the activities of the two brothers from the time they leave their home in the morning until their return in the evening on a typical school day. The story was tape recorded and played to the subjects twice. After listening to the story for the second time each subject was given the following instructions:

> John, the elder brother in the story, has just passed his primary school leaving examinations and is now attending a boarding school outside the city. The younger brother will continue attending the same school. Now you tell me what Peter does.

In order to facilitate the production of the third person singular, the subjects were instructed to begin their oral recall with the sentence frame "Every day Peter . . . ." The sentence frame was written on a blackboard.

The task was administered to each subject individually. The same set of instructions was given to all subjects. The instructions were first given in English and subsequently repeated in Shona. It was, however, emphasized that the responses should be in English.

The task was presented as if it were testing how much of the text the subjects could recall, and not their grammatical accuracy, in an effort to divert the subjects' attention away from linguistic form and towards content.[3] The accuracy of the subjects when they were paying a limited amount of attention to linguistic form could then be assessed. After the oral task, each elementary and intermediate student was asked to produce a written version of the oral task. The written task was produced immediately after the oral task. The story was replayed twice to the subjects before the written task.

Data Scoring

The third person morphology was elicited using an oral recall task in which the subjects were expected to narrate the habitual activities of one of the participants in the story. The story consequently created obligatory contexts (o/c's) for the production of the third person singular because in order to respond to the

question of the interviewer, the subject was compelled to use the third person singular. It was therefore felt that the o/c measure was an appropriate measure of analysis. All the other verb forms produced in the narrative were seen as variants of the third person singular from the learner's perspective, because they were produced in an attempt to describe the habitual activities of one of the brothers. In other words, the variants had an identical semantic function. It was expected that the following would be alternants of the third person singular in the production of the learners: *-s*, zero, and *-ing*.

In (1) are some examples of the use of the variants of the third person taken from the data (an asterisk indicates that the italicized form is ungrammatical):

(1)   a. He lives in Belvedere.

       b. *If he has money left, he *board* a bus.

       c. *After school *ending* he boards a bus back home.

The zero and *-ing* were scored as deviant, as were cases in which the *-s* morpheme had been supplied inappropriately, that is, overgeneralized. By counting cases of overgeneralization the analysis avoided inflating the competence of the subjects, as the ability to use a rule involves not only knowing when to apply it, but knowing when not to use it (Long & Sato, 1984; Huebner, 1983; Tarone 1987, 1989).

Each verb form was therefore scored as either correct or deviant. Since repetitions were quite common in the oral narrative, when the same verb was repeated with an identical variant in the same clause, it was counted only once. However, when the same verb was repeated with two different variants, irrespective of whether the first was correct and the second deviant or vice versa, both attempts were included in the scoring--one counted as correct and the other incorrect--as in (2):

(2)   a. After school Peter waits, waits for the bus.

       b. *. . . and he *see*, sees clothes in the shops.

       c. *. . . he plays, *play* football.

Although the discourse fragment in initial position in the narrative was unplanned, the segments in different discourse

positions in the narrative may have differed in terms of their degree of plannedness. The degree of discourse plannedness was assessed on the basis of the speaker's rate of articulation. The articulation rate was calculated following Towell (1987) by simply subtracting the total amount of time spent pausing from the speech rate. The articulation rate was an indirect measurement of the degree of speech automatization (Faerch & Kasper, 1984). A high rate of articulation suggests an increase in the degree of plannedness while a lower rate of articulation suggests a decrease in the degree of plannedness. The rate of articulation was used as an indicator of the degree of plannedness of the discourse. Interest in this study was, however, restricted to unplanned discourse .

RESULTS AND DISCUSSION

Elementary Subjects

The fourteen subjects from the elementary group produced a total of 125 verbs in o/c's requiring the use of the third person singular. The number of contexts produced varied from three to seven contexts with an average of five contexts per subject. Context was syntactically defined, by referring to the NP preceding the verb, whether realized as an NP, pronoun, or ellipted. A predominant number of the verb tokens in the recall task were uninflected. In other words, the dominant variant was the zero form. In the oral recall task, of the total number of 125 verbs produced there were only eleven *-s* variants and seven *-ing* forms (see Table 1):

TABLE 1

Third Person Singular Forms Used
in Unplanned Discourse

Elementary (N = 14)

	-s	∅	*-ing*	hybrid forms	Total
All contexts	11 (9%)	102 (81%)	7 (6%)	5 (4%)	125 (100%)

Other than the majority of zero forms, there were a few instances in which "hybrid" forms were produced. The hybrid forms consisted of a few occasions in which irregular past tense verb forms were inflected producing verb forms such as *wents*, *gots*, *rans*, and *boughts*.

The occurrence of hybrid forms suggests that irregular past tense verb forms such as *went* and *got* are not seen as past tense verb forms of *go* and *get*. The hybrid forms indicate that the irregular verbs are being treated separately in the lexicon. A similar phenomenon has been reported in child language studies by McDonough (1986).

The verbs attracting the *-s* variant most were *go*, *play*, *live*, and *stay*. This partially indicates that all verbs are not necessarily inflected for the third person singular at the same stage of IL development. The hypothesis that some verbs attract the *-s* variant earlier than others is convincingly demonstrated by Abraham (1984).

However, although the verbs *go* and *play* attracted the *-s* variant, they also occurred with the zero form in identical linguistic contexts. For example, the learners alternated between supplying the *-s* form and zero form when the grammatical subject was a full NP, as demonstrated by the examples in (3) from the elementary subjects:[4]

(3)   a. Peter plays with his friends . . .

        b. * Peter *play* with his friends after school.

That *go* and *play* attracted both the *-s* and zero forms while other simple verbs such as *eat* and *walk* attracted the zero forms arose only partly from the fact that the two verbs are highly practiced (they occur with a high degree of frequency in the textbooks which constitute the main source of TL input to the subjects). The verbs might also be perceived to have a high communicative value in a formal classroom environment.

However, it is also interesting to note that when the subjects were asked to produce a written version of the oral task the majority of the verb forms were still uninflected. The written version can arguably be regarded as more planned than the oral recall task, because the subjects not only had more time to carry out the task but, more importantly, they were more familiar with the requirements of the task, having previously carried out the task orally.

The predominant use of the zero form may be explained by two factors: the learners' perception of the TL facts and the communicative value of the structure under investigation. In the TL, it is only the third person singular which is inflected, whereas the verb forms for all the other persons are uninflected. This may lead the learners to omit the *-s* when producing the third person singular. On the strength of the relevance principle, the learner may not feel the need to inflect for the third person because the information which the inflection would convey is already carried in the grammatical subject.

The predominant use of the zero form is also corroborated by Fairbanks (1983), who reports that his Japanese learner in casual speech largely used the zero forms. However, it is not clear from the Fairbanks study whether the extent to which the use of the zero form by his subject was facilitated by an interaction of the subject's perception of TL facts and the learner's native language.

Intermediate Subjects

The analysis of the intermediate subjects concentrates on the effects of different linguistic contexts in comparable discourse positions. Not only should studies control for discourse type, but discourse position as well. It is important to emphasize that the analysis in this study is on medially positioned discourse fragments only.

Two types of subject pronouns were identified and coded. For the first type of pronoun the subject pronoun immediately preceded the verb. In the case of the second type of pronoun, the

pronominal subject was separated by an adverbial from the verb. Examples of the two types of pronouns in subject positions in the middle of the narrative are cited in (4):

(4)   a. He goes to the shops after school.
       b. *He usually *go* to the shops after school.

There were 101 responses of the subject pronoun + verb type. There were only 6 responses of the subject pronoun + adverbial + verb type. Results are shown in Table 2:

TABLE 2

Third Person Singular Forms Used in Contexts
Pronoun + Verb/Pronoun + Adverbial + Verb
in Unplanned Discourse

Intermediate (N = 16)

Contexts	-*s*	∅	-*ing*	Total
Pronoun + Verb	34 (33%)	67 (67%)	0 (0%)	101 (100%)
Pronoun + Adverbial + Verb	1 (25%)	5 (75%)	0 (0%)	6 (100%)

Table 2 displays the overall suppliance of -*s* variants in frequencies and percentages in the two types of pronominal contexts in unplanned discourse. An analysis of the data shows that the experimental subjects were more likely to supply the -*s* variant when the pronoun immediately preceded the verb than when the verb was separated from the pronoun by an adverbial.   The results, however, have to be treated with caution because of the very few examples of subject pronoun + adverbial + verb available in the data.

Parallel Coordinate Constructions

This section reports on an investigation into the effects of different linguistic contexts on the suppliance of TL variants. Of the responses collected 74 were produced as parallel coordinate constructions. (5) is an example of a coordinate construction taken from the data produced by the intermediate subjects:

(5)   *Every day he climbs a bus and he *get* off at the bus stop near the pub.

The set of coordinate constructions which were investigated was restricted to those sentences in which the conjunction was overtly marked and the grammatical subject was a pronoun. When the subjects did not use a zero anaphor (an ellipted pronoun), the tendency was to use a pronoun. Results are shown in Table 3:

TABLE 3

Third Person Singular Forms Used in
Parallel Coordinate Constructions in Unplanned Discourse

Intermediate (N = 16)

Clause	-s	ø	-ing	Total
First Clause	18 (49%)	19 (51%)	0 (0%)	37 (100%)
Second Clause	11 (30%)	26 (70%)	0 (0%)	37 (100%)

Table 3 shows the overall suppliance of -s variants in first and second clauses in parallel coordinate constructions. The spread of TL variants may be regulated by two factors. First, the amount of attention which a learner pays to linguistic form may fluctuate during the process of production. A learner might not be able to pay as much attention to linguistic form in a second clause as she can in the first clause. The decline in the amount of attention may thus partly explain why the level of grammatical accuracy is lower than in first clauses in parallel coordinate constructions.

constant pressure to attend to other aspects of the task, such as situational appropriacy. Because second language learners have limited amounts of information processing capabilities, long utterances are likely to make heavy demands on their processing abilities (Skehan, 1987). Therefore, because of the heavy demands on their retrieval mechanism, they are likely to attempt to perform what Towell (1987) calls a "balancing act," in which they assign more effort to language retrieval at the expense of other aspects of linguistic cognition such as grammatical accuracy. This balancing act manifests itself in a decline in accuracy in second clauses, implying that attention is clause bound. If attention is clause bound, as I am suggesting, then contrary to Tarone (1979, 1982), the degree of attention a learner pays to speech may not only vary between styles but within the same style depending on the linguistic complexity of the utterances in the style.

The sentences in (6) provide an example of a zero anaphor in a second clause from the production of one intermediate subject:

(6)   a. *Everyday he plays football and then *go* home.

       b. He likes to play football and after that catches a bus home.

Table 4 shows how the *-s* and zero variants were spread depending on whether the subjects used a zero anaphor or a pronoun in a second clause:

TABLE 4

Third Person Singular Forms Used in Second Clauses in the
Contexts Pronoun + Verb/Zero Anaphor + Verb
in Unplanned Discourse

Intermediate (N = 16)

Contexts	-s	∅	-ing	Total
Pronoun + Verb	10 (38%)	2 (17%)	0 (0%)	12 (100%)
Zero Anaphor + Verb	2 (8%)	24 (92%)	0 (0%)	26 (100%)

As Table 4 reveals, the intermediate subjects in this study used more
-*s* variants in a second clause when there was a pronoun
immediately preceding the second clause verb than when there was a
zero anaphor. It is interesting to note the use of more TL variants
when there is a pronoun in the second clause than when it has been
ellipted. On the basis of the "relevance principle" (Andersen, 1989),
one would expect the intermediate subjects to inflect the verb more
frequently when the pronoun has been ellipted than when it has been
supplied. The relevance principle is based on the assumption that
the subjects frequently omit the third persons -*s* because in most
cases the information provided by the -*s* is already present in the
grammatical subject. If the relevance principle were applicable to the
data from the intermediate subjects, we would expect the
intermediate subjects to inflect verbs more frequently when using a
zero anaphor because the information would be relevant in marking
the third person as a grammatical subject. This, however, does not
imply, as Poplack (1980) and Young (1988) suggest, that the
functional hypothesis as formulated by Kiparsky (1972) is
fundamentally flawed. It simply suggests that there is evidence
against the redundancy principle when it is applied to second
language learners, particularly the group examined in this study.
Kiparsky's functional hypothesis was not formulated with second
language learners in mind.
    Evidence against the relevance principle is not restricted to
the third person singular but can also be found in other

morphological areas, particularly in the marking of plurality. Young (1988) reports that the presence of a morphological marker of plurality in the NP favors plural marking on the noun, and, conversely, the absence of a marker of plurality inhibits inflection on the noun. Similarly, in my study the presence of a pronoun or NP triggers inflection, while the presence of a zero anaphor triggers a zero morpheme.[5]

The decline in accuracy between clauses can be traced back to the general preference by the subjects to use zero anaphors instead of pronouns in parallel coordinate constructions. An IL transfer argument is also possible here. In Shona, it is grammatical to supply a person and number prefix on the verb in the first clause and not on the second.

The tendency to inflect the verb when using pronouns rather than zero anaphors may arise from the fact that the presence of a pronoun signals to the learner that the upcoming verb has to be inflected. The signal is likely to be lost in the presence of a zero anaphor. The use of pronouns as signals for inflection may be a strategy which the subjects use arising from their classroom language learning experience. In the language classroom, the subjects are taught verbal paradigms by practicing inflections with pronouns, such as *I play*, *he/she plays*, *we play*, *they play*, and so on. This type of classroom instruction partly accounts for the saliency of pronouns as signalling upcoming *-s* marking.

Ellis (1988) reports that his subjects were more accurate when the grammatical subject was a pronoun than when it was a full grammatical subject. An attempt to examine the effects of NPs and pronouns on verbal inflection was abandoned in my study for the following reasons: First, the intermediate group produced more pronouns than NPs; the few NPs occurred at the beginning of the narrative when the subjects clearly sounded nervous, evident in the way their voices shook. It was felt that variables such as the emotional state of the subjects had intervened, which made it likely to make suspect the results of a simple direct comparison of the findings from the Ellis study.

The other reason which partially explains why it was inappropriate to compare the effects of NPs and pronouns on verbal inflection has to do with the position the NPs and pronouns occupied in the narrative. The position which a linguistic item occupies in a text is likely to have an impact on whether the verb after the subject is inflected or not, or indeed how frequently it is inflected. For example, it is possible to speculate that an NP in grammatical subject position in a segment in discourse-initial

position may have a more powerful effect when attracting verbal inflection than when the same linguistic item occurs in medial and final discourse positions, because the learner's capacity to control verbal inflection may be susceptible to the position the item occupies in the narrative. Discourse-initial, medial and final positions, as pointed out earlier in this paper refer to the position the items occupy in the entire discourse (a multi-sentenced stretch of talk) and not to the position occupied in a single utterance.

The articulation rate followed what might be called a U-shaped planning curve. Learners started off with a high rate of articulation which subsequently declined in the segments in the middle of the narrative. There was, however, a marked increase in the rate of articulation towards the end of the narrative, suggesting an increase in the degree of plannedness towards the end of narrative.

It can be argued that even in unplanned discourse, initial discourse segments are much more salient in the mind of the learner (as evidenced by the high rate of articulation) and hence tend to be much more planned than segments in medial positions. Inasmuch as a learner may produce more planned narratives in discourse-initial positions, it is quite likely that the same learner may also have pre-planned how to bring her discourse to an end, as evidenced by an increase in the rate of articulation. Thus, linguistic contexts in segments which are in final positions in a narrative may be more accurate than those in discourse positions which are in the middle of a narrative because the former are more highly planned than the latter.

CONCLUSION

The experimental subjects of most of the studies on variability come from Asian and Indo-European language backgrounds. It is therefore interesting to report that variability also occurs in the IL speech of speakers of Shona, a language typologically different from both Asian and Indo-European languages.

Level of proficiency seems to be a fairly strong determinant in generating morphological variability. The intermediate group is much more variable than the elementary group. The elementary group has a single invariable rule for verbs: applying the zero morpheme to verbs (e.g., *go*). This rule seems to be prompted by a

cluster of factors. The elementary learner's reading of TL rules leads to the use of the uninflected forms even for the third person. The effects of cognitively deploying the relevance principle inhibit inflection when the information it carries is redundant. The influence of the subjects' native language reinforces the strength of the relevance principle. The elementary learners' performance is not susceptible to differences in linguistic context, unlike the intermediate group.

The elementary and intermediate groups responded to the same factors in different ways. While the elementary learners seek to limit redundancy by omitting the third person singular, the intermediate group works in the opposite direction. They increase redundancy by inflecting the verb when a pronoun is present.

Differences in discourse mode were controlled for because all the data was elicited from an oral recall task. This study suggests that even in the same narrative, different discourse segments may vary in terms of their degree of plannedness; I also propose that differences in plannedness may be indirectly assessed on the basis of the speaker's rate of articulation.

Three main limitations of this study relate to the structure which was selected for analysis and to the way the analysis was carried out. First, future studies may greatly benefit from studying not only the third person singular but also from an analysis of how the ability to inflect the third person singular is connected to the use of pronouns as grammatical subjects. For example, I argue that the pronoun or NP triggers inflection. A contrary position could easily be adopted, namely, that the presence of inflection triggers the suppliance of nouns. The controversy as to whether the presence of pronouns triggers inflection or whether inflection leads to the suppliance of overt grammatical subjects could potentially be resolved, ideally in a longitudinal study which investigates how pronouns and verbal inflection are interrelated, focusing not on a group as a whole but on individuals. The second limitation has to do with the method which was adopted for analysis. The results of the subjects were all added together; thus the possibility of examining whether the pattern observed for the group was also true of each individual was not explored. The third limitation arises from the absence of a more fine-tuned analysis of the data. An expansion of this study might also examine the extent to which variability is a result of gender differences.

NOTES

[1] Shona is a Bantu language spoken mainly in Zimbabwe and is, together with English, one of the country's official languages. It is also the medium of instruction in the early years of primary education in the rural schools, after which the medium switches to English in the latter stages of primary education.

[2] The 1988 Ellis study is different from his 1987 one in which he carefully controls for differences in discourse type by comparing the effects of manipulating planning conditions on IL grammatical accuracy.

[3] Arguably the attempt to manipulate the subjects' performance by diverting their attention away from linguistic form towards the content of the story might not have succeeded as well as originally intended because the language learning environment from which the subjects are drawn is a normative one which emphasizes grammatical accuracy over fluency. Possible indicators that the subjects were paying more attention to linguistic form than expected by the researcher are the number of syllables produced per minute by each subject and the articulation rate. The high frequency of repetitions, self-corrections, and lengthening of syllables reflects a fairly high degree of monitoring during actual production.

[4] The observation that verbs such as *go* and *play* attract the *-s* variant and the zero form may reflect variation among individual learners in the elementary group, as opposed to general patterns across the whole group. If one or two learners could have very different IL systems, this would confound the data.

[5] Contrary to the argument presented in this paper that the presence of pronouns or nouns triggers inflection, Jaeggli & Safir (1989) argue that it is the presence of inflection which triggers the suppliance of nouns.

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APPENDIX

The Elicitation Instrument

Instructions

You are going to hear a story about two brothers. Listen carefully because the story is going to be played to you only twice. After the second replay you will be asked some questions.

The Stimulus Story

My name is Peter and I've an elder brother called John. We *live* in Belvedere. We both *go* to the same school together by bus and *get* off at the Police Station near the beer hall. Before entering school we *visit* a grocery shop where we *buy* some buns and bottles of coca cola. As soon as we *arrive* at school we *join* different classes. John is in grade 7 and I am in grade 5.

On most days we don't *meet* until lunch time. I *eat* my lunch with John, and then we *play* a game of football with our friends.

When classes *finish*, we *meet* outside the school gates but we don't *go* straight home. Instead John and I *walk* to the shopping centre. We *watch* people passing and *visit* some clothing shops. We *don't* usually *buy* anything, but just *admire* the clothes. If we still have money we *get* on a bus and *go* back home.

Instructions Given After Second Replay

John, the elder brother in the story, has just passed his primary school leaving examinations and is now attending a boarding school outside the city. The younger brother will continue attending the same school. Now you tell me what Peter does, beginning with "Every day Peter . . . " We are not interested in how grammatically accurate your English is; we want to know how much information you can recall in English.

Conditions on Transfer:
A Connectionist Approach

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The purpose of this paper is twofold: (1) to comprehensively discuss conditions under which L1 transfer tends to occur, and (2) to explain these conditions in terms of the connectionist framework of second language representation, processing, and acquisition, primarily relying on the localized connectionist model (CLM = Connectionist Lexical Memory) of Gasser (1988). The conditions identified are: (1) interlingual mapping, (2) markedness, (3) language distance, (4) learner characteristics, (5) cognitive load, and (6) sociolinguistic context. It is argued that the connectionist framework explains L1 transfer effectively and that the interaction of these factors determines the degree of L1 transfer in interlanguage.

INTRODUCTION

The field of second language acquisition (SLA) has seen many changes in research trends in recent decades. This is particularly true with regard to the role of the first language (L1) in SLA. Contrastive Analysis (CA), which was the center of attention in applied linguistics in the 1950's and early 1960's, was neglected during the 70's, as research interest shifted from L1 transfer to universal aspects (e.g., the "natural order" of morpheme acquisition [Krashen, 1978]) in SLA. Since the 1980's, the pendulum seems to have swung back, and the present goals of research into L1 influence on SLA are "to state more precisely the conditions under which interference took place and the type of L1 knowledge that was utilized" (Ellis, 1985, p. 33; see also Felix, 1980 and Hatch, 1981 for similar points). This paper addresses this very problem--the conditions on transfer[1]--in a more comprehensive way. In so doing, I will attempt to apply a connectionist framework (Gasser, 1988, 1990) since it provides a new perspective on language transfer, posing new questions and reviving some old questions about L1

transfer.   Connectionism is a radical departure away from the existing paradigm in cognitive science and is quickly gaining ground (e.g., MacWhinney, 1989).   As Gasser (1990) states, the connectionist approach "has already reshaped the way many cognitive scientists think about mental representations, processing, and learning" (p. 179).   Thus, if SLA is to be part of cognitive science, it should at least try to learn from the insights of that field and perhaps start research projects within a connectionist framework.

Paradigm Shift

Behind the criticism of the contrastive analysis hypothesis was, of course, a paradigm shift in the fields of linguistics and psychology; this shift became known as the "Chomskyan revolution" (Newmeyer, 1986).   Chomsky's review of *Verbal Behavior* by B. F. Skinner (Chomsky, 1959) and his own *Syntactic Structures* (Chomsky, 1957) changed cognitive scientists' (psychologists' and linguists') view of human behavior, including language.   As a result, structural linguistics, the audio-lingual approach, and the contrastive analysis hypothesis, all closely aligned with behaviorism and associationism, lost ground, and the universalist approach to L2 acquisition became predominant, a development which resulted in declining interest in language transfer.

Connectionism, on which this paper is based, is currently thought to have the potential to cause a new paradigm shift (e.g., Sampson, 1987; Schneider, 1987; Clark, 1989) in the field of cognitive science, which includes linguistics, psychology, neuroscience, philosophy, and artificial intelligence (AI).   For decades, cognitive scientists have tried to understand the mind at a symbolic level, assuming that our cognitive processes involve using rules to manipulate symbols (Allman, 1989; Bates & Elman, 1992). Formal linguistics is a good example of such an approach. However, although much research has been done within the symbolic paradigm, its limitation has become apparent.   Digital computers, which simulate human behavior using symbol manipulation, for instance, cannot cope with certain tasks that a child can easily handle, including natural language processing, even though they show human-like ability in other kinds of tasks, such as computation and chess.   Connectionists, who propose a radical shift in the approach to human cognition, do not believe in symbolic rule systems; they hold that symbolic rule systems are actually the

manifestation of patterns of neural network activation and, as such, are *emergent*, that is, behavior which appears to be rule-driven has actually resulted from certain patterns of neural activation. The connectionist model has been simulated on computer programs, which have been able to learn some aspects of language.

Critics of connectionism (e.g., Fodor & Pylyshyn, 1988; Pinker & Prince, 1988)[2] say that it is only behaviorism in a new guise because connectionist learning is attained in a manner similar to the "stimulus-response" type of learning which characterized behaviorism. Although there seems to be some truth to this charge, the fundamental difference between connectionism and behaviorism is that the former does not disregard what is "inside the black box," i.e., what goes on between input (stimulus) and output (response). Indeed, connectionists try to simulate what goes on inside the black box by using computers, basing these simulations on a particular model of how the human brain works: that neural networks are connected with different weights and activated in response to stimuli and that this activation is massively parallel instead of serial. In other words, connectionism is concerned with the *internal representation* of knowledge and the architecture that supports it, whereas behaviorism is not.

If there is a similarity between connectionism and behaviorism, it is that connectionism is particularly relevant to the phenomenon of L1 transfer (Gasser, 1990). Therefore, as this paper will argue, the connectionist approach may provide new and more sophisticated interpretations of language transfer as well as new insights into the role of contrastive analysis in predicting language transfer.

One might wonder why it is necessary to discuss transfer in SLA using a connectionist model when it also can be explained by existing approaches. The advantages of the connectionist approach to existing approaches in SLA research are as follows:

> 1. Connectionism is concerned with what is going on inside the black box. Most of the present approaches in SLA try to explain "behaviors" by looking at input and output without much concern about what is going on inside the brain. Connectionism has "architecture"--a conception of the cognitve hardware that causes observable behavior. Moreover, to some extent, the way connectionist learning operates is constrained by neurobiological reality.[3]

2. Connectionism is a general cognitive model that handles human behavior in general, not only second language acquisition phenomena. Limited domain theories which have been proposed in SLA are important, but they should be reinterpreted within a more integrated framework (Hatch, Shirai & Fantuzzi, 1990) that would make research in SLA more relevant to general issues of cognitive science, thus creating a way for SLA to contribute to cognitive science in general.

3. As was stated earlier, connectionism is very different from the existing research paradigm (the symbolic approach) in cognitive science. SLA, which has also followed the traditional symbolic approach, should benefit from a connectionist approach, as other areas of cognitive science already have.

4. By applying the connectionist framework, it becomes possible to test certain hypotheses by using computer simulation, an important tool which has been used in cognitive science for understanding human cognition.

The Connectionist Framework

Connectionism can roughly be categorized into two types: localized connectionism and distributed connectionism. Localized connectionism (e.g., Cottrell & Small, 1983; Gasser, 1988; Waltz & Pollack, 1985) uses particular units to represent concepts, such as TREE, PUT, SUBJECT, etc. In this sense, it is similar to the symbolic approach; however, it is still radically different because it does not assume overt rule systems. Distributed approaches, often referred to as PDP models (e.g., McClelland, Rumelhart, & the PDP Research Group, 1986; Rumelhart, McClelland, & the PDP Research Group, 1986; Gasser, 1990; Sokolik & Smith, 1992; Henning & Roitblat, 1991), on the other hand, use a system of representation that is "distributed over many units, and each unit participates in the representation of many concepts" (Gasser, 1990, p. 181). For example, in Gasser (1990), concepts such as AGENT,

MARY, or SLEEP are represented over many units as patterns of activation.

In this paper, a localized connectionist approach is used to illustrate the mechanism of transfer, simply because it is much easier to use a localized model to explain how connectionist models work in relation to language transfer. No claims are being made about the superiority of localized connectionist models vis-a-vis distributed models in terms of their neural plausibility.[4]

As a cognitive model, connectionism must address three problems: representation (the way knowledge is represented in the brain), process[5] (the way knowledge is activated/fired for use), and learning. Linguistic knowledge in localized connectionist models is represented over many nodes and in the strength of connection/association between nodes. For example, the words "bread" and "butter," both represented on different nodes, may have a strong connection because of their strong linguistic/conceptual association. In bilingual lexical knowledge, an L1 word is assumed to be strongly connected with its L2 equivalent (this point will be discussed in greater detail momentarily). In short, different kinds of knowledge (i.e., lexical, morphological, syntactic, pragmatic, and world knowledge) are represented over many nodes and are organized by means of connection weights.[6]

Processing in a connectionist model is a particular pattern of activation and firing of nodes. Each node has a threshold level (as does a neuron), and if its activation level reaches threshold, it fires. Moreover, if there is competition between nodes, the node that receives the greatest activation is the one which fires. For example, when a speaker asks, "Are you coming to the party tomorrow?" there should be competition between COME and GO, since they share very many features in common, and therefore are both activated. The only reason COME would be chosen (i.e., fired) is deictic information, e.g., whether the speaker is going to be at the party or not. It is therefore the greater activation from nodes relevant to this deictic information which makes the COME node fire the word "come" over "go."

An example from Gasser (1988) illustrates how such competition between nodes works. Figure 1 is a schematic depiction of an English-Japanese bilingual speaker's representation of what is cognitively involved in talking about "spoiling" someone:

Figure 1. Nodes and Connections in a Bilingual Context*
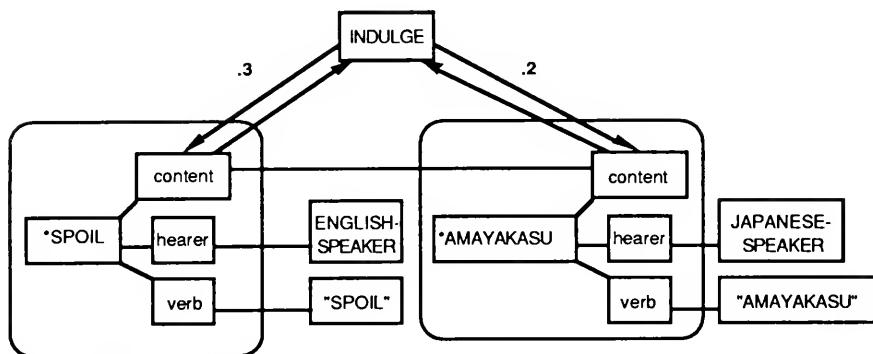
*From Gasser (1988, Figure 1.9, p. 16). Gasser's title for this figure was "Competing GUs in a Multilingual Context."

As can be seen in Figure 1, the nodes, shown as squares, represent semantic content, linguistic forms, hearer roles, and so forth. Here, the content of INDULGE is shown as being more strongly associated with English knowledge than with Japanese knowledge and therefore has a stronger connection weight to English (.3) than to Japanese (.2). Other things being equal, this bilingual speaker would thus say "spoil" instead of "*amayakasu*," the Japanese equivalent. In the real world, however, the presence of a monolingual Japanese interlocutor would activate a hearer node in the Japanese speaker, resulting in "amayakasu" being uttered by the speaker, while the presence of monolingual English interlocutor would activate a hearer node in the English speaker, resulting in the speaker uttering "spoil." If many bilingual speakers were present, both the Japanese and English hearer nodes would be activated in the speaker, perhaps resulting in language mixing, a situation which Gasser (1988) reports.

According to the connectionist model, learning is considered to be the result of this kind of processing. Essentially, the more often particular nodes at the ends of connections are activated and/or fired, the stronger the connections become; consequently, stronger connections become more easily activated, and this greater ease of activation constitutes learning. In the case represented by Figure 1,

if a Japanese-speaking learner of English keeps saying "spoil" instead of "*amayakasu*," the association will be stronger, and it will be easier for him to say the word when speaking in English. This process would constitute learning of the word "spoil" for this learner. To summarize, "representation" in the connectionist framework is equivalent to connection weights between nodes, "processing" refers to patterns of activation and firing at a given point in time, and "learning" refers to the change of weights (or strengths of connections) over time.

It was pointed out earlier that a connectionist approach to language acquisition is effective in dealing with language transfer. As Gasser (1990) states:

> Transfer is precisely what connectionist models are good at. Once a network has learned an association of a pattern P1 with pattern P2, when it is presented with a new pattern P3, this will tend to activate a pattern that is similar to P2 just to the extent that P3 is similar to P1. Thus the connectionist framework provides an excellent means of testing various notions about the operation of transfer in SLA . . . . The claim then would be that overlap of any type between L1 and L2 should be the basis of transfer. (pp. 189-190)

In a nutshell, because in the processing of information the existing representation is always activated, the L1 knowledge representation (i.e., the existing representation) always reshapes incoming L2 information, thus affecting subsequent learning of new L2 patterns.

The challenge for connectionists is how to represent L1 and L2 in a realistic way, and it should be admitted that so far the model has been limited to a small number of sentence patterns (Gasser, 1988). However, the model produces very interesting results and can even produce speech errors--those made by native speakers as well as L1 transfer errors often made by L2 learners. The following sections attempt to explain the mechanism of language transfer using the connectionist framework.[7]

Conditions on Transfer

In previous SLA research, the following factors (although the list may not necessarily be exhaustive) have been proposed as governing when L1 transfer tends or tends not to occur:

(1)   Interlingual mapping
(2)   Markedness
(3)   Language distance (perceived/real)
(4)   Learner characteristics
(5)   Cognitive load
(6)   Sociolinguistic context

Any one of these factors is of course by no means an absolute determiner of the presence or absence of language transfer. Instead, these factors are supposed to interact with one another, and the particular interactions are thought to affect the degree to which the transfer of L1 is observed in L2 processing/learning. I will discuss each of these factors below in greater detail.

(1)   Interlingual Mapping

"Interlingual mapping" refers to linguistic mapping between L2 and L1. Any linguistic item of L1 has a particular mapping on L2. The basic claim which has been made is that the easier or more straightforward a particular mapping is, the more likely it is that transfer will occur. Tanaka & Abe (1989) state that "it can be hypothesized that language transfer is likely to occur in the linguistic areas where it is *easy to find interlingual equivalents*" (p.79) (emphasis mine).

Previous research has identified to some degree the linguistic levels where transfer tends or tends not to occur. Tanaka & Abe (1989) summarize these findings and state that language transfer is almost non-existent when learning morphemes,[8] not very strong in the learning of syntax (or becomes weaker as the learner's proficiency increases), and is strong in the area of semantics (lexicon), pronunciation, and discourse.[9] They further state that in the area of morphology, for example, since it is difficult for learners to find interlingual equivalents, transfer is weak in this area.

lexico-semantic transfer

Since Tanaka & Abe (1985) claim that transfer is persistent in semantics, let us first discuss this claim using the connectionist model of language processing/acquisition. Gasser (1988) provides an example of negative transfer produced by a Japanese learner of English. The learner keeps saying "water" when she is supposed to say "cold water." The reason for this persistent error is assumed by Gasser to be L1 transfer because in Japanese the concepts HOT

WATER and COLD WATER are expressed using separate words--
"*yu*" and "*mizu*," respectively. In this case, she consistently makes
the same error, although she knows it is an error in English. I
would argue that from a connectionist point of view there are two
possibilities for explaining this phenomenon. One is that this person
first activates and fires the node for the Japanese word for "*mizu*,"
which then activates and fires the English equivalent "water" with
which it is strongly associated. Another possibility is that her
representation of the concept NOT-HOT-WATER is strongly
associated with the word "water" and it is fired without any
activation from Japanese word "*mizu*." Gasser (1988) argues for
the latter possibility, but it is not really clear which is correct, and
this uncertainty continues to be an issue in bilingual lexical
representation (e.g., Kroll & Curley, 1988). Nevertheless, what is
important is that in both cases a strong association between the L1
word and its L2 equivalent exists. In the case of the first possibility
there is still a strong association between the two; in the second,
there used to be a strong association between the two, which has
resulted in an incorrect pattern of association (i.e., NOT-HOT-
WATER = "water"), even though the Japanese word "*mizu*" is no
longer fired.

The implication of the above example in general
connectionist terms is this: when learners find an L1-L2 equivalent
(either consciously or unconsciously), they tend to use it in
production and comprehension.[10] In the case of lexical semantics, it
is very easy to find interlingual equivalents (i.e., straightforward
mapping), and in limited situations such a strategy works and makes
the connection/association stronger, further resulting in an increase
in the firing of the same nodes. Until negative evidence comes up
(or even after that), this process is repeated and the connection
becomes very solid. In previous research, it has also been claimed
that lexico-semantic transfer is strong (e.g., Tanaka & Abe, 1985;
Ijaz, 1986; Shirai, 1989), and this claim makes sense in view of the
above explanation of transfer. It is not surprising, therefore, that
lexico-semantic transfer is "pervasive and persistent."

morphology

The area of morphology, especially bound morphology, has
been assumed to be relatively free from L1 constraints (e.g., Dulay
& Burt, 1973; Krashen, 1981). However, the principle of
"interlingual mapping" also holds in morphology. Indeed, although
a "natural" order of morpheme acquisition has been claimed, there

still is cross-lingusitic influence. Andersen (1983), citing Cancino (1979), exemplified the difference in the acquisition orders of an L1 Spanish learner of English and an L1 Japanese learner of English, a difference which Andersen attributed to L1 transfer. For example, Japanese has a form similar to English for possessive (e.g., John *no* (possessive marker) pen = John's pen), but no plural markers, while Spanish exhibits the opposite situation.   This contrast facilitated the Japanese learner's acquisition of the English possessive marker relative to the Spanish learner's. Sasaki (1987) makes a similar claim, pointing out that five Japanese-speaking learners (Hakuta, 1974, three subjects from Koike, 1981, and her own subject) of English in naturalistic settings all acquired the possessive -*s* earlier than in the proposed "natural order." Sasaki further states that the five Japanese subjects showed a high correlation among their own acquisition orders but a low correlation with the "natural order." Sasaki thus criticizes the Natural Order Hypothesis (e.g., Krashen, 1981), which treated Hakuta's Japanese subject (Uguisu), a counter-example to the natural order, as an idiosyncratic variation. Lightbown (1983) also reports a case of a group of French learners of English whose different accuracy order she attributes to the influence of L1.

Clearly, therefore, even though a natural order has been claimed in the literature based on correlational or implicational studies, we still need to resort to an L1-transfer explanation even in the area of morpheme acquisition.   Further, the pattern of development can be explained by the principle of "interlingual mapping," which claims that if L1-L2 mapping is simple, transfer tends to occur. In other words, when L1 and L2 are similar in structure, not only positive transfer (e.g., the early acquisition of possessive -*s*) but also negative transfer (e.g., the overuse of possessive -*s*) may occur.

Hatch (1983) suggests that the acquisition of morphemes can be explained by "naturalness" factors such as perceptual saliency, frequency, and invariance of forms, as well as by the "L1" factor. In connectionist terms, such a claim can be interpreted as follows: the naturalness factor makes it easy for a particular form to be connected to a particular meaning/function. It will be easy to identify and easy to match; there will be many opportunities to strengthen connections. This results in the Natural Order.   In addition, L1 factors facilitate the recognition and connection formation between an L2 form and its meaning/function when the learner has equivalent (similar) form/function relationships in his or her L1 (e.g., possessive in Japanese).

pragmatic/discourse transfer

As claimed by Tanaka & Abe (1989), it seems that transfer is also apparent in the area of pragmatics/discourse. Examples are abundant in the SLA literature (e.g., Richards, 1971; Scarcella, 1979, 1983; Schmidt & Richards, 1980; Blum-Kulka, 1982; Olshtain, 1983; Beebe, Takahashi, & Uliss-Weltz, 1990). Though the entire area of discourse/pragmatic transfer is too broad to be given proper treatment here, it is important to consider it briefly in two subsections--micro-level and macro-level transfer--because although both these categories are viewed as discourse/pragmatic transfer in SLA, they are different in terms of processing, i.e., in terms of the mechanism by which each takes place.

micro-level transfer: Micro-level transfer is surface-level transfer of L1 forms, which typically results in negative transfer in the realm of pragmatics/discourse. Kato (1989), for instance, notes that many English speakers who learn Japanese as an L2 use a direct translation of "Do you want to . . . ?" for invitations/suggestions, though this kind of construction is inappropriate as an invitation in Japanese. The function of "Do you want to . . . " in Japanese is restricted to purely literal inquiries, unlike in English. Similarly, as cited in Odlin (1989), Kasper's (1981) example of a German L1 speaker using "should" in cases where native speakers of English would use more indirect forms is also a case in point. In both of these examples, the result (or product) is an unintended illocutionary force. This kind of surface-level transfer of L1 forms can of course occur at the lexical, phrasal, or sentential level. In terms of processing, the cases of micro-level pragmatic transfer are not at the pragmatic/discourse level, although they are usually treated as such in SLA literature because the product results in a pragmatic error. In fact, the process (the firing of L1 nodes) which results in this kind of transfer is almost identical to L1 lexical transfer, as discussed above.

macro-level transfer: Macro-level transfer, in contrast, is truly pragmatic/discourse transfer in that the learner activates his or her L1 knowledge about pragmatics/discourse as part of "world knowledge." In other words, unlike micro-level transfer, what is transferred in macro-level transfer is not an L1 form, but L1 knowledge about discourse. For example, it has often been pointed out that L1 rhetorical structure is transferred to L2 and can result in either negative or positive transfer in comprehension and production

(e.g., Kaplan, 1966; Maccoun, 1983; Oi, 1986; Connor & Kaplan, 1987). As Hatch (1989) notes, in L2 comprehension/production we must rely on "world knowledge" even though we do not know which parts of world knowledge are universal and which are culture-specific. Therefore, in using L2, we activate relevant world knowledge when we perform in contexts similar to those for L1, and knowledge about L1 rhetorical structure is part of our world knowledge.

The same type of "world knowledge" transfer can occur in conversational interaction at the level of the speech event/act. For example, "How's it going?" as a casual greeting in American English is problematic for many ESL learners because, depending on the situation, it is not necessary to actually answer the question. In other languages, however, it may be the case that you need to give a verbal response (Schmidt & Richards, 1980). This difference sometimes results in international students feeling negatively about American people, whom they are perceive as "cold" or "superficial" because of failing to give a response in such a conversational environment.

Gasser's (1988) CLM includes three kinds of knowledge necessary for attaining a speaker's goal: (1) context-specific conventions (e.g., "I'll have . . . " in a restaurant context), (2) cross-contextual conventions (e.g., politeness), and (3) general knowledge about illocutionary acts, (e.g., "let the hearer know what is desired but convey pessimism about the chance of success" (p. 46) when making a polite request). Although knowledge about rhetorical structure has not yet been represented in connectionist models (though there are some symbolic AI models which do look at rhetorical structure), it seems possible that rhetorical knowledge could be incorporated as part of (3), general knowledge about illocutionary acts. In the CLM, then, the knowledge thus represented would be activated when a speaker or writer tries to attain a goal; thus, in L2 performance, it would be natural for L2 learners to activate the same L1 knowledge structure as they would when trying to attain the same goal. Moreover, knowledge types (2) and (3) are probably more likely to be activated because they appear to be more universal than (1).

(2)   Markedness

In SLA literature, markedness[11] is assumed to be a strong constraint on transfer. The basic assumption is that when there are two structures which differ in markedness, the less marked (or

unmarked) one is more likely to be transferred (e.g., Gass, 1981). Although there can be problems in determining what a marked form is, the principle seems to hold true for the most part. For our purposes, we must consider markedness in the learner's L1 as well as in the L2. Other things being equal, we can assume that what is unmarked in L1 and what is unmarked in L2 are more transferable than what is marked, since Kellerman (1977, 1978, 1979) and Jordens (1977) have established that what is unmarked in L1 is more transferable to L2 than what is marked, in the area of semantic transfer. Moreover, Zobl (1983, 1984) supports this notion in the area of grammar (but see Eckman, 1977 for a different view in the domain of phonology).

Although connectionism is often regarded as anti-nativist, it is not true that innateness has no place in connectionism. As Bates & Elman (1992) state, "there is no logical incompatibility between connectionism and nativism" (p. 17). Therefore, the problem of markedness in SLA can be explained by assuming some type of pre-wiring in the network (Gasser, 1990). Indeed one possibility is that if we suppose there are innate predispositions for humans in language acquisition (e.g., a universal acquisition order for some structure), it could be assumed that there are innate patterns of association between connections which are difficult to alter by subsequent learning. (It must be noted, however, that in most cases connectionists do not assume an innate component to explain the acquisition of knowledge, including language.)

Another possibility is that some markedness conditions are not innate (e.g., Kellerman's markedness in lexical semantics) but learned. The scenario in this case would be that since unmarked items are usually more frequent or perceptually salient (e.g., Ferguson, 1984), connections for these items would be made very easily. Such connections acquired after birth may also become too strong to alter later in life. This possibility is, of course, more congruent with connectionism, which emphasizes learning by data available in the input/environment. Although the issue of markedness and transferability is still not resolved (Ellis, 1985), it appears that the connectionist framework is flexible enough to handle it.

(3)   *Language Distance (Perceived/Real)*

Kellerman (1977, 1978, 1979) suggests that transfer is more likely to occur when L1 is typologically similar to L2. What is important for Kellerman is not the actual similarity or difference

between two languages but the perceived distance. For example, even though Japanese is typologically very similar to Korean, if a learner is totally unaware of the similarity between the two languages, s/he may not use transfer readily. This perceived distance is called "psychotypology" by Kellerman (1983).

In relation to this notion, Gasser (1990) used a distributed connectionist network to simulate certain aspects of second language acquisition. One result was that when L1 words were similar to L2 words, there was more transfer in word order, or, in other words, when L1 words were similar to L2 words (e.g., cognates), the word order of L1 tended to be transferred to that of L2. As Gasser points out, the result is interesting because it supports the view of language distance as a constraint on transferability. However, it also goes against the notion of "perceived" distance, since a computer simulation program does not have any intention or thought and therefore could not believe, or psychologically perceive, L1 as being different from L2.

These seemingly conflicting observations could be interpreted as follows: first, it is probably the case that regardless of the "perceived" distance between L1 and L2, if actual distance is close, transfer is more likely to occur. This would be possible because, if L1 and L2 are typologically similar, the use of prior knowledge (in connectionist terms, the existing strength of associations between nodes) tends to work well which in turn facilitates the learner's use of the same learning mechanism (prior strength will be further strengthened, with new connections between L1 and L2 nodes added on). Therefore, even without any perception/belief about language distance, transfer can be facilitated.

Second, it is plausible that "perceived language distance" may also have an effect on transferability. Knowledge about language distance can be either "meta-knowledge" about the distance between languages (i.e., conscious knowledge learned from some source or knowledge generalized through the learner's own struggle with the L2) or "unconscious knowledge" (i.e., typically, the kind of knowledge held by very young children acquiring two languages at the same time).[12]

Precisely how the "perception" of language distance would influence connectivity must yet be resolved. In any event, language distance (whether perceived or real) is an arguably important condition on language transfer.

(4) Learner characteristics

learning environment

It has been suggested in the literature that L1 transfer is strong when learners learn another language in acquisition/input-poor environments, i.e., in environments where the chances for naturalistic communication are limited, as is typically the case in foreign language (as opposed to second language) situations (Krashen 1978, 1981; Ervin-Tripp, 1974; McLaughlin, 1978), and this observation is easily explained in connectionist terms. When L2 learners learn the L2 in an acquisition-poor setting, they tend to use a "grammar translation approach," which necessitates that the learner "connect" L1 to L2. Hence, transfer errors, of the kind discussed in the section on lexical transfer, would be predicted. However, Tanaka & Abe (1985) revealed that Japanese learners learning English in English-speaking environments showed the same "rate" of lexical transfer as did classroom EFL learners, a finding which seemingly goes against the earlier notion that classroom EFL learning would tend to increase transfer. Nevertheless, Shirai (1990) has explained this surprising observation by the connectionist model: learners in ESL contexts need to communicate in the L2 and must initiate utterances by relying on their L1, to some degree, especially at early stages, which means they have to make L1-L2 connections between lexical concepts. As a result of this process, L1-L2 connections may become stronger and harder to eliminate later, and this might offset any advantages such learners have over EFL learners, who rely on grammar-translation but do not really have to communicate in the L2. This interpretation suggests a new hypothesis regarding a condition of transfer: when a necessity for production exists, there is a higher likelihood of creating L1-L2 connections, thus increasing transfer.

level of proficiency

It has been suggested in the literature that L2 learners rely on L1 knowledge when their L2 knowledge is not sufficient. This idea has been empirically supported by Taylor (1975) and Dommergues & Lane (1976) in the area of syntax. Major's (1986, 1987) Ontogeny Model also supports this notion in the area of phonology. The claim that L1 transfer is strong at the early stages of L2 development is of course not surprising. When there is a gap in what a learner can say and what s/he wants to say, it is necessary to

rely on whatever knowledge is available. When L2 syntax is not fully developed, a learner has to fall back on L1 syntax, for which the neural network is already fully developed.

This argument recalls the notion of "relexification" as being one of the characteristics of early L2 acquisition (e.g., Schumann, 1982). In this view, the learner, not knowing enough L2 syntax, substitutes L2 lexical items for L1 lexical items, using the same word order as in L1. Krashen (1981) also claims that learners use an L1 + Monitor mode when the knowledge of L2 is not sufficient.

In connectionist terms, L1 transfer at lower levels of L2 proficiency can be explained as follows: word order is determined in two ways in Gasser's (1988) CLM--one is by the lexicon (lexical items have syntactic information, too); the other is by the sequencing component. In early stages of L2 development, syntactic information has to be created from the facts of L2 input. However, while L2 syntactic knowledge is still meager, the learner has to utter something. Therefore, s/he must activate his or her readily available L1 word order knowledge to produce L2 utterances.

age

SLA literature has shown that adult learners tend to show more L1 transfer than younger learners, at least if a learner's performance is compared to the ultimate attainment achieved by adult and child learners. One area where L1 transfer has been shown to be especially evident for adults is phonology (e.g., Oyama, 1976). As the critical period hypothesis claims, it appears to be difficult to acquire native-like L2 pronunciation after puberty, and this difficulty may be due to neurobiological factors (e.g., brain plasticity, lateralization), to psychomotor factors (e.g., dexterity of speech muscles), or to affective factors (e.g., language ego, attitude) (Brown, 1987). Kennedy (1988), who has proposed an information-processing approach to explain child-adult differences in SLA, claims that once automatic knowledge in L1 is created (a process called "unitization"), it is difficult to alter it later in life. Although at this stage we do not know the precise reason for this difference, it does seem that adults are at least more prone to transfer than children.

Munro (1986) provides a connectionist explanation for a general critical/sensitive period in learning. His point is that a critical period can be accounted for by a "reduction in the modifiability of neuronal response characteristics as their synaptic connections are strengthened as a result of experience" (pp. 471-

472). In other words, experience would create a pattern of connections that would be difficult to modify or alter later in life. This reduction of modifiability corresponds to Kennedy's notion of unitization. When an L1 connection is formed and solidified as a system, it may indeed be the case that subsequent alteration of certain connections is difficult.

(5)   Cognitive Load

attention and monitoring

It seems to be a common observation that when L2 learners speak in situations with high cognitive loads, it is difficult for them to maintain accuracy. For example, when I participate in English in a discussion at a graduate-level seminar, I find myself making many grammatical, morphological, and phonological mistakes. Specifically, I probably do not attend to the distinction between /l/ and /r/, which are allophones of a phoneme in my L1, and additionally make many errors in articles and 3rd person singular -*s*, even though I know all these rules and know how to produce correct forms. It has also been observed that, in interviews, L2 learners' accuracy and fluency drastically decline when topics become difficult (e.g., description of movies involving unfamiliar objects).

This inability to attend to accuracy in situations of high cognitive load can be explained within an information-processing framework (e.g., McLaughlin, 1978, 1987; McLaughlin, Rossman, & McLeod, 1983; Færch & Kasper, 1986; Bialystok, 1988; Kennedy, 1988). Such an argument maintains that in any kind of skill learning, we tend to automatize our knowledge. When a skill is automatized (i.e., overlearned), it is no longer necessary to pay attention for the behavior to be successful. When we must pay attention to our behavior, before the knowledge or skill is automatized, we must use our working (short-term) memory, which has a limited capacity. Therefore, when L2 learners confront tasks with a high cognitive load (e.g., discussions of complex matters, descriptions of unfamiliar objects), their attention is diverted and their accuracy of L2 production breaks down.

When it is difficult to pay attention to their behavior, L2 learners tend to rely on automatized knowledge, which does not require any space in working memory. The relevant automatized knowledge available for L2 learners is interlanguage knowledge which has become automatic and L1 knowledge. Therefore, when a learner's automatized interlanguage knowledge is unstable or

insufficient for communication needs, s/he tends to fall back on L1 knowledge, which is already automatic and readily available. Hence, the conclusion which has been documented in SLA research: when cognitive load is high, L1 transfer tends to occur. Now, how might this concept of cognitive load relate to connectionism?

conscious knowledge and connectionism

It must be admitted that conscious knowledge seems to be a problematic area both for Gasser's (1988) CLM and for connectionism in general. In the CLM, conscious knowledge, or what Krashen calls the Monitor, is not represented. The problem is that if conscious knowledge is to be represented and built into the system, as Gasser (1988) states, it "must operate on the output of generation as it is currently handled in the model. That is, they [i.e., rules of grammar] would have to check words that are about to be uttered" (p. 202).

This problem of incorporating conscious knowledge is not a trivial matter in modelling an L2 learner's knowledge. In the case of L1 knowledge, it may not be a serious problem because the knowledge is unifaceted; that is, the native speaker's knowledge of language can be accessed basically in an automatic fashion in comprehension/production. On the other hand, L2 learners (especially L2 learners in foreign language settings) have knowledge (e.g., 3rd person singular -*s*) which may not be readily accessible in a communicative setting.[13] Furthermore, even if a conscious knowledge component is added to the CLM, it may be difficult to specify how it will affect the change in unconscious knowledge (i.e., learning) represented in the network.

How, then, can connectionist models handle this problem? It may be possible, as Norman (1986) suggests, that a kind of conscious knowledge is closely mapped onto the network of unconscious knowledge, activating and inhibiting the connections between relevant nodes. Further, Clark (1989) claims that the connectionist system can handle such conscious rule-learning. However, the mechanism by which these might be done is not clear. This issue remains an area where future work is necessary.

Another important issue in relation to consciousness is how initial stages of language acquisition can be characterized. In L1 acquisition, conscious strategies may be minimal.[14] Gasser (1988) states that L1 acquisition "would begin with knowledge of concepts and some of the goals that are realized by linguistic means" (p. 198) and that, later, patterns of association would develop between

concepts and phrases (e.g., BATH TAKING and "take a bath"). Gasser's assumption, in line with Peters (1983), that "syntax would arise out of the learning of lexical patterns" is a view of how representation of language presumably develops in the early stages of L1 acquisition.

Adult L2 acquisition, on the other hand, may be more strongly guided by conscious strategies (Schmidt, 1990). Certainly in classroom settings, it is teaching which primarily develops a learner's conscious component. Yet even in naturalistic settings, a learner's observations will basically develop a conscious component. In both cases, the conscious knowledge developed will gradually be automatized, eventually becoming available for production and comprehension.

(6) Sociolinguistic Context

hearer-role

It is Speech Accommodation Theory (e.g., Beebe & Giles, 1984; Giles & Byrne, 1982) which explains style-shifting in interlanguage within a social psychological framework: that the speech of L2 learners tends to be similar to that of interlocutors when they identify with the interlocutor group (a process called "convergence"), but tends to be dissimilar when they do not identify with the interlocutor group ("divergence"). In Beebe's (1988) example of speech accommodation by Chinese-Thai children, when the children speak with a Chinese speaker, their L2 (Thai) reflected greater Chinese influence (i.e., L1 transfer). In my experience in foreign language classrooms in Japan, when, as is often the case, students intentionally speak English (especially in oral reading) in a heavily Japanese-accented English, this would be a case of convergence to their peer group and divergence from the target-language group. It thus seems that L1 transfer is stronger when the learner is "converging" to the L1 group, while it is weaker when the learner is "diverging" from the L1 group.

This influence of the hearer can certainly be implemented by Gasser's CLM connectionist model, which has "hearer-role" nodes. In Gaser's terms, when the learner is speaking with someone from the same culture, the hearer-role (represented as a node) is specified as such. Whether the learner likes it or not (i.e., is goal-driven or not), the hearer-role is activated, which leads to a spreading activation of the nodes connected to it. Thus, the model would be

able to show the kinds of adjustment which are called "accommodation."[15]

subject matter

Beebe (1988) also suggests that even when the hearer is the same, Chinese-Thai children had a greater L1 (Chinese) influence in their L2 (Thai) when they discussed Chinese holidays than when they discussed Thai holidays. This finding suggests that when a learner discusses something about his or her own country, the L1 schema may be strongly activated, thus facilitating L1 transfer. Such an observation recalls the results of research using word association tests, in which subjects showed different responses to L1 and L2 stimuli and produced responses which were often culturally-loaded. Ervin-Tripp (1964, 1967) found, for example, that Japanese-English bilinguals' responses to English stimulus words were similar to those of monolingual Americans, while their responses to Japanese cues were similar to those of monolingual Japanese. These findings point to the strong connection between L1 lexicon and L1 conceptual structure as well as between L2 lexicon and L2 conceptual structure. Consequently, if the L1 conceptual structure is activated, L2 performance will be influenced by L1.

The Contrastive Analysis Hypothesis Revisited

One of the weaknesses of the CA hypothesis was that its predictions were based only on the linguistic analysis of two languages. When the hypothesis was tested against actual learner data, it was not consistently supported (Briere, 1968, for phonology; Whitman & Jackson, 1972, for syntax). As Tanaka & Abe (1988) state, the difference-difficulty hypothesis may not hold at the level of individual linguistic items, though it may hold true at the level of typological differences between the two languages in question. Also, as Wardhaugh (1970) has claimed, a priori predictions of difficulty at linguistic levels seem problematic.

On the other hand, it should be pointed out that there is supporting evidence for the CA hypothesis. Recent studies (e.g., Tanaka, 1983; Takahashi, 1985) have tried to test a somewhat modified version of the hierarchy of difficulty based on the contrastive analysis hypothesis (e.g., Prator, 1967, as cited in Brown, 1987) in the area of lexico-semantics, and the results have given some support for the hierarchy. It has also been claimed that learners whose L1 has an article system (Master, 1987) or plural

morphemes (Young, 1990) learn the corresponding system more easily than learners whose L1 does not have these structures. We thus cannot deny the possibility that the CA hypothesis may still have some validity in a priori predictions of difficulty at the level of certain linguistic items, if other variables can be controlled.

In this connection, it should also be pointed out that in the present framework contrastive analysis is understood to be merely one of many factors influencing transfer. It is seen as interacting with all the other factors discussed in this paper, not operating entirely on its own. It is therefore not reasonable to expect too much from contrastive analysis; it may have some a priori predictive power in terms of transfer, but only on the condition of "other things being equal."

Another consideration with regard to the CA hypothesis is the general mechanism of transfer. One condition proposed in this paper is interlingual mapping, which predicts that straightforward mapping helps form connections, thus facilitating transfer. It was also argued that in the acquisition of morphemes, when L1 and L2 have similar structures, (positive) transfer helps early acquisition. This view recalls Oller & Ziahosseiny's (1970) study, in which learners whose native languages used Roman scripts made more spelling errors due to transfer than learners whose L1 did not use Roman alphabets. These findings also suggest that similarity leads to transfer, whether negative or positive (see also Weinreich, 1953; Wode, 1978; Long & Sato, 1984). Indeed, the "difference-difficulty hypothesis" of the CA hypothesis (Lado, 1957) may be reinterpreted in a more neutral way, because difference does not necessarily lead to transfer errors. Such a reinterpretation could be called a "similarity-transfer hypothesis" and would be totally congruent with a connectionist approach, since when a new pattern is encountered which is similar to another existing pattern in the learner's representation, the new pattern would activate the existing pattern.

The discussion in this section is merely a first attempt at reinterpreting the CA hypothesis in a more sensible way; obviously, further consideration of this problem is necessary. Indeed, SLA research, I believe, must address the issues regarding the CA hypothesis, which was "laid to rest" (Brown, 1987) without rigorous empirical testing because it lost its theoretical foundation. Today, with a new framework (connectionism), we ought to take another look at this important question of transfer.

CONCLUSION

In this paper, I have tried to specify conditions where L1 transfer can be understood to tend to occur, using a connectionist model of human information processing.[16] The paper tries to be comprehensive in identifying the factors behind transfer: I have tried not only to identify factors but also to explore the "lower-order" (i.e., closer to the neural level) of processing. Although preliminary and speculative at this stage, this essay is an attempt to look inside the "black box" of second language acquisition/processing.

Among the issues that ought to be explored further within a connectionist framework are (1) which factors are strong and (2) which factor(s) interact with which other factor(s). There are at least two possible ways to investigate these questions. One, as used in the connectionist framework of SLA research proposed by Gasser (1990), is computer modeling. Though it may be premature to claim that computer modeling is identical to human L2 processing/acquisition, it is an interesting method for investigating SLA mechanisms because it can control for intervening variables and has no sampling problem as far as subjects are concerned. Therefore, it does not necessitate statistical testing; the experiment conducted on a machine is always replicable, and the results can be compared with what is known about L2 acquisition in humans. Henning & Roitblat's (1991) study, which simulates a Spanish-speaker's acquisition of English negation, is a project along these lines. Secondly, another possible method is to use actual SLA data, though it goes without saying that we would need a large data base and sound operational definitions of the factors discussed in this paper. One such study, Puolisse & Schils (1989), an investigation of communication strategies which effectively controls for several independent variables, suggests that time pressure (which is closely related to cognitive load factor) is stronger than proficiency level in determining the degree of "transfer strategy" used by a learner. Continuing this line of research would certainly be valuable in addressing some of the issues I have raised.

Apparently, most language teachers and learners assume that the learner's mother tongue has an important role in second language learning. It seems that after the confusion created when universals in acquisition were overemphasized and variability studies including L1 transfer did not get much attention, studies on transfer are enjoying a comeback. What we now need is a sound theory and

sound methodology to test the theory.   The connectionist framework, as presented in this paper, may contribute to the further specification of L1 transfer: which factors condition transfer and the role transfer plays in second language processing and acquisition.

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NOTES

[1] In this paper, transfer is defined as the effect of the knowledge of one language on the learning/processing of another. With this definition, not only the effect of L1 on L2 learning but also the effect of L2 on L1 can be included. This definition also includes the role of a third language in language transfer.

[2] See also the criticisms of Fodor & Pylyshyn (1988) and of Pinker & Prince (1988) by Clark (1989, chapters 8 and 9).

[3] See Schumann (1990, 1991) for why it is necessary to have architecture and neurobiological constraints for theory building in SLA. See also the upcoming special issue of *IAL* on neurobiology and language acquisition, to be guest-edited by John Schumann.

[4] This is not a trivial question because some of the strongest points to be made in support of the connectionist approach are realizable only through distributed representation (e.g., graceful degradation; see Clark, 1989, chapter 5; Gasser, 1990; Hinton, McClelland, & Rumelhart, 1986). In this paper, however, I will not go into this issue, but will discuss L1 transfer in such a way as to be congruent with both localized and distributed approaches. Simply put, locally represented concepts/nodes can also be represented in a distributed fashion (Gasser, 1988). For further details concerning localized vs. distributed representation, see Gasser (1988, chapter 11) and Feldman (1986).

[5] In this paper, the word "process" is synonymous with "processing" but is used in a sense which is different from that current in SLA literature. For example, "acquisition process" in SLA refers to the process of change that extends over time. It should also be noted that in most SLA studies, the distinction between representation and process(ing) is not at all clear (Carroll, 1989).

[6] Gasser's (1988) model of connectionist lexical memory (CLM) does not have a phonological component, but he claims it would not be difficult to add such a component to the model.

[7] A comprehensive review of connectionism is unfortunately beyond the scope of this paper. For more comprehensive reviews of connectionism in relation to SLA, see Schmidt (1988) and Gasser (1988, 1990).

[8] "Morphemes" here should be interpreted as inflectional morphemes.

⁹ "Discourse" here means the linguistic level which cannot be handled by the knowledge of one sentence only. This involves the realms of what Canale (1983) called "discourse competence" and "sociolinguistic competence," domains which roughly correspond to Bachman's (1990) "textual competence" and "pragmatic competence," respectively.

¹⁰ Although the examples discussed are cases of "negative transfer," there are obviously many cases of "positive transfer." Otherwise, L2 learners would not use the strategy of searching interlingual equivalents. Evidence of such searches is pervasive in the literature of child L2 acquisition research, where it is pointed out that learners constantly request translation equivalents or offer comments on the lack of equivalents in the native and target languages (see Hatch, 1978).

¹¹ See, for example, Ellis (1985, chapter 8) for the role of markedness in second language acquisition.

¹² The distinction between "conscious" and "unconscious" should be viewed not as a dichotomy but as a continuum (e.g., Takala, 1984). Moreover, even young children use conscious strategies in learning L2 (e.g., Hatch, 1978).

¹³ For example, even though I (an advanced L2 learner of English) know the rule of third person singular -s, I often fail to put -s in obligatory contexts when speaking communicatively.

¹⁴ This notion is congruent with the fact that babies have been shown to have limited development of those cortical areas which are responsible for declarative knowledge (i.e., the medial temporal region) (Schumann, personal communication).

¹⁵ The idea of a "hearer-role" can also be applied to "foreigner talk," which is a case of convergence to the nonnative speaker by the native speaker. It also partially explains language switching/mixing.

¹⁶ I have argued strongly in this paper for a connectionist approach because it provides a new perspective from which to interpret SLA phenomena. However, the debate between the two camps--symbolic and connectionist--is by no means settled (for a critical evaluation of connectionism from the symbolic perspective, see Pinker & Mehler, 1988). It has also been suggested that a promising approach would be a hybrid of the two paradigms (e.g., Clark, 1989; Holyoak, 1991).

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The Older Second Language Learner:
A Bibliographic Essay

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It is difficult to find research concentrating on second language acquisition by older adults, since most studies differentiate only between children and adults, accepting puberty as the division between the two language-learning stages. In an effort to locate studies on the older adult second language learner, one online and three compact disk databases were searched, using search strategies and subject headings appropriate to each particular file.

INTRODUCTION

Although a large body of literature exists on age-related differences in second language acquisition, few studies are available on older second language learners. This paper documents an effort to locate journal articles which concentrate specifically on second language learning by older adults and the problems involved in narrowing the search to this area of interest.

There seems to be general agreement that there are age-related differences in second language acquisition but few answers to many of the questions which can be raised. For example, is the adult second language learner at a psycholinguistic disadvantage? Is foreign language learning easier for the 6 year-old than for a student at age 16, and are the disadvantages greater for a 60 year-old adult? Is there a critical period for second language acquisition? Those who hold that there is such a critical period base their hypotheses on the work of Lenneberg (1967), who concluded that after puberty language learners must make "a conscious and labored effort" to acquire a language because of the specialization of functions in the hemispheres of the brain (p. 176).

Since most studies thus differentiate only between children and adults, and accept puberty as the division between the two language-learning stages, it is difficult to find research which

concentrates on second language acquisition by older adults. Some studies can be located through a non-systematic but intuitive and serendipitous approach, especially when scholars know both the experts in the field and the relevant journal titles. One of the most comprehensive studies which can be located in this way is an ERIC document by Joiner (1981), which addresses the characteristics and needs of older adults learning foreign languages at colleges and universities. Another article is by Burling (1981), who wrote of his personal experiences when, in his mid-50s, he spent a year in Sweden and tried to learn to speak Swedish. He attributes his unsatisfactory progress to factors other than neurological maturation. A third easily found article which addresses second language learning and the older adult is by Zdenek (1986), who reports that in an adult evening course in conversational Spanish which he taught, one of the best students was over 90 years old.

Two Ph.D. dissertations also concentrate on adult second language learners. The first, by Brandt (1983), is a study of the acquisition of German as a second language by two adult immigrants to the Federal Republic of Germany. Basing her discussion on data which were collected in the form of weekly tape-recorded interviews over a period of seven to eight months, Brandt concludes that psychological factors were of central importance to the language acquisition of these learners. The second dissertation, by Brown (1983), focuses on the acquisition of a second language by adults over age 55. In Brown's study, journals were kept by matched groups of older and younger adult learners of Spanish, interviews were conducted, and oral proficiency tests were administered. Referring to her study as hypothesis-generating, Brown concludes that several qualitative factors played a role in the differences observed between the younger and older adult learners of Spanish as a second language.

SEARCHES

In an effort to locate more systematically recent additional studies on the older adult second language learner, one online and three compact disk databases were searched using search strategies appropriate to the particular file. Database thesauri, if available, were consulted to select key terms or subject headings, and retrieval was limited only to those journal articles published since

1983. Each search retrieved articles on age and second language learning, but narrowing the search so as to focus on older learners by combining three or more sets does exclude some relevant material. That relatively few studies on older adults were retrieved in this manner can probably be attributed to the following factors: (1) many authors concentrate on Lenneberg's critical period theory; (2) subject headings such as "Adulthood" and "Age Differences" may include studies of older adults but are not limited to that age group; (3) there are fewer older adults than other age groups studying foreign languages or being studied by researchers.

In general, the use of subject headings (i.e., terms used by the indexer to describe the subject content of the document) retrieves citations which are more relevant than those located only by searching the basic index. Subject headings are identified by "/DE" in *Linguistics and Language Behavior Abstracts* (LLBA), by (SH) in the *MLA Bibliography*, and as hyphenated terms in the ERIC and PsycLIT compact disks. The following describes the databases and search strategies that were used for the bibliographic search:

1. ERIC on SilverPlatter Compact Disc

> (Second-Language-Learning OR Bilingual-Education OR Second-Language-Instruction OR Second-Languages OR English-Second-Language) AND (Middle-Aged OR Older-Adults OR Retirement-) AND (EJ in FI)

Although the term "Language-Proficiency" combined with various "Adult" terms retrieved some additional documents relevant to the topic, the second language focus was not necessarily the central one. The terms "Adults," "Age-Differences," "Adult-Education," "Adult-Learning," and "Adult-Students" were also tried, but most did not retrieve any older adult studies. The term "EJ in FI" restricted the search to the journal literature, but there are many other types of relevant ERIC documents in the database as well. It should be pointed out that the citations retrieved from any search of an electronic database will, of course, always contain the requested terms, but they may not necessarily be in the desired context. For instance, three of the citations retrieved from ERIC were about older adults who were teaching English as a second language.

2. LINGUISTICS AND LANGUAGE BEHAVIOR ABSTRACTS (DIALOG file 36)

> Second Language Learning/DE AND (Age Differences in Language/DE OR Adult Language/DE) AND (Elderly/ID OR Older/ID OR Retire?/ID OR Aged/ID)

In this database, identifiers such as "Second Language Acquisition," "Age Factors," "Age Role," and the subject headings "Bilingualism" and "Plurilingualism" were also tried, but they yielded few additional citations of interest. It was found that the addition of the identifiers for older adults (see above) was necessary to narrow the search to the age group of interest. The question mark in "Retire?/ID" is DIALOG's truncation symbol, which retrieves any word beginning with the word stem searched.

3. MLA Bibliography on WilsonDISC Compact Disc

> Language (BI) AND (Second (BI) OR Learning (BI) OR Teaching (BI)) AND (Age (SH) OR Adults (SH) OR Adulthood (SH))

The *MLA Bibliography* Subject Index lists many potentially relevant subject headings: "Second Language," "Second Language Learners," "Second Language Learning," "Second Language Reading," "Second Language Teaching," "Second Language Writing," "Second Language Comprehension," "English Language Learning," and "[other languages, e.g., French, Spanish, etc.] Language Learning." In addition to "Age," "Adults," and "Adulthood," "Elderly" was also tried. Although a search using subject headings is preferable to using only the basic index, the presence of a large number of possibly relevant language subject headings in this database makes a subject heading search rather unwieldy; however, each does contain the term "Language" and either "Second," "Learning," or "Teaching." The qualifier "(BI)," Basic Index, retrieves words from the subject, title, and notes pertaining to an article's contents.

4. PsycLIT on SilverPlatter Compact Disc

> (Foreign-Language-Learning OR Foreign-Language-Education) AND (Adult-Education OR Adulthood-)

The addition of "(Aged- OR Aging- OR Old-Age OR Middle-Aged OR Retirement-)" retrieved only one additional document.

RESULTS

The search strategies followed above represent an effort to be comprehensive. In most cases, combining "Second Language Learning OR Foreign Language Learning" with the appropriate "Adult" terms retrieved most of the relevant citations. Although some relevant studies were retrieved from each of the databases searched, most are from ERIC and LLBA. Several "Adult" subject headings in ERIC gave more access points and increased the output. Studies of college students were excluded unless older learners were specifically mentioned.

The search located the following articles from the recent journal literature, all of which elaborate on age as a factor in second language acquisition, especially in the case of older adult learners:

Abuhamdia, Z. A. (1985). Does age make a significant difference in language learning? Implications for foreign language teaching policy. *Multilingua: Journal of Interlanguage Communication, 4*, 35-42.

Arabski, J. (1984). The role of age in second/foreign language acquisition. *Glottodidactica, 17*, 65-71.

Brandle, M. (1986). Language teaching for the "young-old." *Babel: Journal of the Australian Federation of Modern Language Teachers Associations, 21*, 17-21.

Cohen, Y. & Norst, M. J. (1985). Emerging patterns in the needs of adult language learners in Sydney: Results of a survey. *Babel: International Journal of Translation, 20*, 3-7.

Dannerbeck, F. J. (1987). Adult second-language learning: Toward an American adaptation with a European perspective. *Foreign Language Annals, 20*, 413-419.

Dolly, M. R. (1990). Adult ESL students' management of dialogue journal conversation. *TESOL Quarterly, 24*, 317-321.

Ehrman, M. & Oxford, R. (1990). Adult language learning styles and strategies in an intensive training setting. *Modern Language Journal, 74*, 311-327.

Ehrman, M. (1989). Effects of sex differences, career choice, and psychological type on adult language learning strategies. *Modern Language Journal, 73*, 1-13.

Eisenstein, M. & Verdi, G. (1985). The intelligibility of social dialects for working-class adult learners of English. *Language Learning, 35*, 287-298.

Elson, N. (1983). The adult learner of ESL. *TESL Talk, 14*, 7-14.

Flege, J. E. (1991). Age of learning affects the authenticity of voice-onset time (VOT) in stop consonants produced in a second language. *Journal of the Acoustical Society of America, 89*, 395-411.

Homstad, A. (1987). Neurolinguistic and psycholinguistic research on learning modes of older language learners: Classroom implications. *Hispania, 70*, 374-380.

Johnson, J. S. & Newport, E. L. (1989). Critical period effects in second language learning: The influence of maturational state on the acquisition of English as a second language. *Cognitive Psychology, 21*, 60-99.

Kennedy, B. L. (1988). Adult versus child L2 acquisition: An information-processing approach. *Language Learning, 38*, 477-496.

Koskas, E. (1985). Strategies de traduction liées à l'age, au contexte et à la modalité d'acquisition de L2 [Translation strategies linked to age, content, and modality of second language acquisition]. *Rassegna Italiana di Linguistica Applicata, 17*, 135-141.

Ode, C. (1986). Autonomous language learning by adults: The Amsterdam experience. *System, 14*, 35-45.

Seright, L. (1985). Age and aural comprehension achievement in Francophone adults learning English. *TESOL Quarterly*, *19*, 455-473.

Sorace, A. (1986). The development of linguistic intuition in adult second language acquisition: A research project. *Rassegna Italiana di Linguistica Applicata*, *18*, 63-76.

Swaffar, J. K. (1989). Competing paradigms in adult language acquisition. *Modern Language Journal*, *73*, 301-314.

Swain, M. & Lapkin, S. (1989). Canadian immersion and adult second language teaching: What's the connection? *Modern Language Journal*, *73*, 150-159.

Taietz, P. (1987). Sociocultural integration of older American residents of Paris. *Gerontologist*, *27*, 464-470.

Thomas, M. (1989). The acquisition of English articles by first- and second-language learners. *Applied Psycholinguistics*, *10*, 335-355.

Tran, T. V. (1988). Sex differences in English language acculturation and learning strategies among Vietnamese adults aged 40 and over in the United States. *Sex Role*, *19*, 747-758.

Zdenek, J. W. (1983). Teaching FLOP. *Foreign Language Annals*, *16*, 103-106.

Zdenek, J. W. (1986). A survival course for the older learner. *Hispania*, *69*, 723-727.

Various reasons are given by the authors of the above list of articles for age-related differences in second language acquisition. The critical (or sensitive) period hypothesis is still mentioned, but teaching methods, motivation, setting, and social and psychological factors (e.g., the learner's concept of self, experience, and application of skills) are also considered to be important.

CONCLUSION

A comprehensive review of literature on the subject of the older second language learner should ideally include, in addition to journal literature, books which can be located by the Library of Congress subject headings (Language and Language--Study and Teaching OR Language Acquisition OR Second Language Acquisition) AND (Adult Education OR Aged). Many academic libraries now have online catalogues in which it is possible to combine subject headings. Dissertations can be located through *Dissertation Abstracts International*, but many are also indexed in online or compact disk subject indexes, such as the *MLA Bibliography* and PsycLIT.

With the number of older people in our population increasing, there is a growing percentage of non-traditional students in colleges and universities and an increased proportion of older students enrolled in second language courses on and off campus. This demographic development should give language instructors and researchers more opportunities for research on second language acquisition by adults. The bibliographic search techniques outlined in this essay can help one get started.

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SPECIAL FEATURE ROUNDTABLE

Preparing Applied Linguists for the Future

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INTRODUCTION

When the call appeared for abstracts to be submitted to the 1992 meeting of the American Association for Applied Linguistics (AAAL), I proposed and subsequently organized a panel discussion on "Preparing Applied Linguists for the Future." At UCLA, my colleagues and I had just been grappling with this topic as part of an eight-year review process. I wanted to open up discussion of the topic and to elicit different perspectives from colleagues at other institutions where applied linguists were being trained. I was fortunate that Leslie Beebe (Columbia University), Craig Chaudron (University of Hawaii), Susan Gass (Michigan State University), Sandra Savignon (University of Illinois at Urbana-Champaign), John Schumann (UCLA), and John Staczek (Georgetown University) all agreed to participate on the panel.

Because of the recent discussions at UCLA on the topic, I asked John Schumann, Chair of the Department of TESL & Applied Linguistics if he would make the opening statement for the panel. I also asked John to circulate a written summary of his remarks to the other panelists one month before the conference so that they could prepare responses to his opening statement as they saw fit.

To the editors of *IAL* I suggested that this topic might be a timely special feature if all the participants wrote up their statements. The editorial board of the journal agreed, and they further proposed that in response to the written statements from the panelists one graduate student from each of the institutions represented on the panel be invited to submit a commentary on all the faculty statements as well. Thus, this special feature was born.

I charged the panelists to think of how we should prepare applied linguists for the future: What background and skills will

future applied linguists need? What work should they be prepared to undertake? What type of doctoral program will best prepare them? The following statements from the six faculty panelists begin with John Schumann's remarks, since his opening statement had been circulated in advance and in various ways served as catalyst for the five other responses, which appear below in alphabetical order according to the name of the contributor:

JOHN SCHUMANN'S VIEW

Training Applied Linguists for the Future

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In this statement on training applied linguists for the 21st century, I will outline some of the thinking we have done at UCLA on this topic over the last several years. When our Ph.D. program in applied linguistics first began in 1978, there were four tracks in the program: language analysis, language education, language acquisition and language use. After basic preparation, students were required to take two courses in language analysis (essentially linguistics courses), two courses in language education, and two courses in either language acquisition or language use. From this breakdown it is clear that applied linguistics was viewed mainly as linguistics and education, augmented by studies of acquisition or use.

Over the years, what became obvious was that the program had very little to offer at the doctoral level in classroom language education. For M.A. TESL students there were courses in ESL methodology, reading in the ESL context, writing in the ESL context, literature in the ESL context, media for teaching ESL, materials development, and classroom language testing. None of these courses was designed for doctoral students, but those at the 200 (graduate) level could be taken by them to fulfill their language education requirement. At the same time, the language testing component began to become very sophisticated, offering such specialized courses as item response theory, structural equation modeling, and construct validity. These were advanced courses and did provide post-M.A. training in language assessment.

In 1989, the department began planning to convert the M.A. in TESL program to an M.A. in applied linguistics. In these discussions we tried to determine what tracks to include, given that the program was to provide research training in applied linguistics such that the graduates would be prepared for doctoral work in this field and ultimately for careers doing applied linguistics research in both educational and non-educational settings. Russ Campbell, who had been department chair in the past, suggested that perhaps a language education component wasn't necessary at all. The reasoning was that in order to

do applied linguistics research in education one would need to know how language is acquired, how to test language proficiency, and how to analyze interaction in language classrooms. Essentially, then, to do research in language education one needs to study language acquisition, language assessment, and discourse analysis. And indeed these areas constitute the very same knowledge and skills that are necessary to do research in non-educational settings, i.e., naturalistic language acquisition, language in the workplace, professional-client interaction, etc. We thus concluded that a component called "language education" did not have to be part of a program designed to prepare applied linguists as language education researchers. We have submitted a proposal to the university for an M.A. in Applied Linguistics program, with basic preparation in language acquisition, language assessment, and discourse analysis, and it is now being considered by the Graduate Council.

A second aspect of applied linguistics training that we deemed essential was that it be interdisciplinary. We wanted to avoid what is sometimes referred to as the "Newbury House Curriculum," in which students of applied linguistics focus mainly on the productions of other applied linguists. Instead we wanted to see our field as having a central concern for language acquisition and use to which we would apply knowledge from sociology, psychology, neuroscience, artificial intelligence, education, philosophy, linguistics, and other fields. We are now redesigning our Ph.D. curriculum with the idea that after rigorous M.A. training with required courses in discourse, acquisition, and assessment, the doctoral program will consist of perhaps one required course and then a thirty-two (quarter) credit sequence--designed by each student in consultation with his or her advisor--for which courses can be taken in any relevant department in the university.

The third aspect of our conception for the training of applied linguists involves establishing a laboratory system in which students are mentored in discourse, acquisition, and assessment apprenticeships. We are currently finishing the construction of a discourse lab, and space has been allocated for acquisition and assessment laboratories. However, we do not view space as constitutive of a laboratory. For our program, a laboratory is a community of scholars with varying degrees of expertise on a particular subject. The goal of such a community is to share expertise so that novices can become experts. This kind of training is frequently two-way because novices in particular areas often have expertise in one or more other areas of interest to the experts. Thus in these labs, faculty as well as students can benefit from working closely together on joint projects.

Over the past fifteen years, UCLA has focused its efforts on enhancing its function as a research university. It is now sharing that focus with a concern for the quality of instruction. The laboratory/mentoring system allows us to work on increasing instructional quality within a framework that encourages the conducting of research and the training of researchers.

One of the reasons that our program has moved in these directions is because the situation regarding practical teacher training in ESL in California and the United States has changed substantially in the last 15 years. When we first began our Ph.D. program in Applied Linguistics, there was a need to train

people who would become teachers and trainers of ESL teachers. Now there are programs all over California and the United States doing precisely that and many of the faculty members in these programs are our graduates. So, in many ways, our students are doing what we have done in the past, and it is time for us to do something new for the field.

When the AAAL organization was first established, applied linguistics was viewed as a field which related theory and practice, and its goal was to develop specific links between theoretical linguistic studies, educational research, and the planning and implementation of practical language programs. This made us sound essentially like the educational arm of the Linguistic Society of America and the research arm of TESOL. But I think a real applied linguistics has to get beyond simply seeking solutions to educational problems. I think we should be able to have an applied linguistics that in many of its enterprises is free from concerns about language education.

Finally, I think I should say that what I have presented here is a description of what UCLA is doing and a rationale for why we are doing it. We are not advocating that other universities go this route, but we think it is a legitimate approach which we should be free to choose and still remain applied linguists.

FACULTY RESPONSES

Applied Linguistics Training:
What it Should Be and What It Shouldn't

Leslie M. Beebe
Teachers College of Columbia University

Applied linguistics is not simply linguistics applied to a practical concern outside linguistics--e.g., linguistics applied to education, to Bible translation, or to dictionary writing. It is not simply sociology, anthropology, psychology, neuroscience, artificial intelligence, philosophy, or any other "real" or "theoretical" field servilely applied to linguistics. It is a field in its own right, overlapping with lots of other fields which also exist in their own right. It is interdependent with other fields, not just dependent on them.

Applied linguistics is nevertheless a variety of linguistics. The study of language use and acquisition is still at the core of all our endeavors. At the 1973 summer Linguistics Institute held at the University of Michigan, I distinctly remember an important message communicated by William Labov, who maintained that sociolinguistics is linguistics and linguistics is sociolinguistics. Almost twenty years later, I still believe Labov was right. Sociolinguistics is linguistics and vice versa. The idea that language--an inherently social behavior--could be accurately understood if treated as separate from social interaction is an anomaly.

Applied linguistics is interdisciplinary. Not every published paper will take an interdisciplinary approach, but the field as a whole must involve interdisciplinary connections. The book I edited, *Issues in Second Language Acquisition: Multiple Perspectives* (Beebe, 1988), was first conceived of as a single-authored introduction to SLA that would improve on other books because it would emphasize SLA as a field properly understood only through diverse interdisciplinary perspectives. As I saw it, SLA had been viewed primarily as a branch of psycholinguistics, but in reality it was a field in its own right which was informed by perspectives from many fields. Soon I realized that the only way to do this book was to join forces with colleagues from many different disciplinary streams. No one person could be competent to write such a broad book with so many interdisciplinary views. Similarly, applied linguistics as a whole is interdisciplinary. When we train the applied linguists of the future, we must depend on the support of many fields--not because we are dependent, but because we are interdependent.

Applied linguistics programs should indeed encompass language acquisition, language assessment, and discourse analysis. However, I see discourse analysis as one aspect of the broader category of language analysis, which describes language knowledge and use. Future applied linguists must be competent to analyze phonetics, phonology, morphology, syntax, discourse, etc. if they are to have a full description of language as a background for studying language acquisition and language assessment. One could argue that these are linguistics, not applied linguistics, courses, but these areas are broad, and the two departments tend to offer different content--both kinds being valuable. Why should phonetic or grammatical analysis be in one department and discourse analysis in another?

We should be careful not to project the plan of one university which is necessarily based on its own resources and priorities onto the curriculum of other universities nationally and internationally. Diverse linguistic needs and resources will necessitate diverse programs in applied linguistics.

At the same time, it is my fervent hope that every program training future applied linguists will keep educational needs as one of its priorities. Since the 19th century, for example, high literacy rates have been correlated with economic success, suggesting that literacy is probably a determinant of national well-being and power. We should not, therefore, ignore such pressing educational needs as the promotion of literacy. I hope that a two-track system will not develop in applied linguistics programs whereby some institutions address so-called "practical" educational problems, such as literacy and ESL, and others address more so-called "theoretical" issues. Every applied linguistics program in the 21st century must be prepared to address social and educational issues of national and international concern.

Applied linguistics should serve the needs of society. "Should" statements are always "preachy" and controversial. I expect this statement may be considered a moral imperative, a given by some, and an inappropriate show of politics or religious fervor by others. So get out your six-shooters.

In the United States, applied linguistics does now and should continue to serve the needs of the nation. I do not mean that every applied linguistics

paper has to have an "applications to education" section at the end. I do not think it even has to have an immediate application to education or to any other field. It does not have to address the needs of so-called "underprivileged" populations. It does not have to tell teachers what to do on Monday. We need diverse research to meet diverse needs, and we cannot get diverse, brilliant, free-thinking research by mandating bureaucratically the way our best thinkers and researchers ought to do their jobs.

Yet applied linguists do hold expertise that is crucial to the future of multi-ethnic nations.   I would submit, therefore, that we have a social responsibility as a group.   In the United States, for example, W.-B. Olsen (1991) reports that there were over two million Limited English Proficiency (LEP) students in grades K-12 in the public schools in 1989-90. That number represented an increase of over half a million from the previous survey in 1985-86. In California's total K-12 enrollment in 1989-90, 18% were identified as LEP--better than one child in six. As for adult ESL students at or below high school level, W.-B. Olsen reports that there were 1.2 million nationwide in the 1989-90 survey. This was an increase of approximately 50% between 1985-86 and 1989-90.

It is said that one out of three people in New York City and in Los Angeles was born outside the United States and that the United States is currently experiencing the largest wave of immigration since the late 19th century. Immigrants are essential to our economy. We can expect a labor shortage as soon as we pull out of the current recession mainly because after the age of the "baby boom" we will enter the age of the "baby bust." We also have a skills shortage in this country. Along with needed unskilled laborers, skilled laborers (e.g., nurses, doctors, scientists, engineers, product designers, and computer software designers) are coming from immigrant populations. We need all of them. And they need us. As a result, language education issues have become central to our public discourse, and they are central to our nation's future. Presidential candidates are formulating future language policy positions. Our expertise is needed now. All of us should participate in the public debate, and all of us should contribute in some way to the solution of national and international language-related problems.

When I argue that applied linguistics should serve the needs of society, I do not endorse a prescription. I do not think that every professor has to be "practical." I do not think that applied linguistics has to be housed in a school of education. I do not think that every applied linguistics researcher has to study ESL needs, developmental writing, reading disabilities, or minority needs. But I do think that as faculty members of applied linguistics programs we must keep these kinds of concerns very sharply in our minds, and we must provide for them centrally in our curriculum. I also think that these concerns are part of applied linguistics. We must provide avenues for our graduate students to pursue these interests. We should not define ESL as "other." We should not see skill development as "other." We should not link research with theory and pose it against teaching and practice. There is classroom-centered research (linguistic and non-linguistic) which relates to research on teaching. We must avoid stereotypes and false dichotomies.

Above all, we must keep in mind that language and power are inextricably related whether we like it or not. Language is a gatekeeper. Language is a reflection of power, and it is a vehicle to get power. Language is a marker of social class, ethnicity, race, gender, age, and societal role. Call me a sociolinguist. Call me a child of the 60's. But let me make a plea that we all keep a social conscience when we train applied linguists for the 21st century. We made some great strides in the 20th century. Let's not stop now.

Applied Linguistics:
How Interdisciplinary Can You Get?

Craig Chaudron
University of Hawai'i at Manoa

To consider how to prepare applied linguists for the future seems approximately similar to a question such as how to prepare engineers or doctors for the future. The range of possible areas of expertise is so vast that there is probably no one right answer. But as I will point out later, I think our problem is a greater one, owing to the entire lack of basis for applied linguistics study in education prior to graduate school. Still, the initial response strikes me as following a set of quick questions: For how distant in the future? Preparing for what purposes? Given what sort of constraints on resources, such as number and areas of expertise of the faculty? With what sort of incoming student expertise and education? Given how much time for preparation? Many other questions follow from these, but I will attempt briefly to offer a few comments on the problems responding to just these.

First, how distant in the future?   This is a somewhat frivolous question, for evidently none of us is capable of predicting the forthcoming needs for trained experts in our field, short of a serious international survey of needs. All we can see now is that there are increasing calls for expertise in a very wide range of applications of knowledge about how language works (or doesn't) and how communication can be enhanced. These needs tend to define the main purposes for education and research, from the need for experts in cross-cultural communication, in language remedial education, in language planning for revival of dying languages, in foreign and second language curriculum research and development, in analysis of speech disorders, in second language acquisition, in computer programming, and even for teaching expertise in programs for applied linguists.

This de facto defining of what we might consider the primary focus of applied linguistics leaves us in something of a quandary, for I think we each tend unavoidably to favor one or another direction of research and educational interests, depending on which needs we have perceived to be most critical or which experiences and resources we have had most contact with. There is no higher authority.

Preparation for what purposes? I don't think we can talk cogently about such a broad topic unless we agree to narrow our thinking to one or another "branch" of applied linguistics. This is to say that if one takes the broadest view of applied linguistics, in which any language-related problems constitute the domain of study (to take the sort of definition proposed in my own journal, *Applied Linguistics*), we have to abdicate any responsibility for preparing applied linguists in any period less than perhaps a dozen years. How many of us can become competent in the theories and applications of the many disciplines that John Schumann has referred to in his opening paper within four or five years of study? For those increasingly few individuals who view this field as one of "linguistics applied" (see the exchange in *IAL*, 1990), it may be easier to envisage a solid period of three years or so of "core" preparation in theoretical and descriptive linguistics and then, for the applied linguist who is going to specialize in language teaching, a few "applied" courses such as a teaching methods course, something on second language learning, and a course in language research or testing; or for one who fancies applications in computer sciences or language planning, an entirely different line of applied courses. For the many who view the field to mean predominantly language education, on the other hand (see comments by Brumfit, 1980 and Widdowson, 1980), the core might look quite different, although some would suggest, as John Schumann appears to do in his statement, that this is already a step removed from the core preparation requirements of applied linguistics.

I am obliged in my own work to accept a wide variety of work as falling under the rubric of applied linguistics, and, therefore, I can appreciate many possible approaches to preparing students to be applied linguists. For example, according to the survey conducted by Gay Conklin (1991), involving a sample of 59 M.A. programs from the TESOL program directory, less than half of the responding programs appear to regard basic second language learning principles or sociolinguistics as important for their program requirements. Conklin also characterized program requirements into four types of knowledge provided in the coursework: content (descriptive knowledge about the English language itself), pedagogic (general pedagogic knowledge), pedagogic content (specific knowledge about language pedagogy), and support (knowledge about source areas, such as psycholinguistics, theoretical linguistics, etc.). Conklin also noted striking differences *within* programs in the distribution among these four categories as well. Thus, M.A. programs can differ wildly with respect to the emphasis of their required coursework. I am quite certain that one of the fundamental sources of this diversity has to do with my third question, Given what sort of constraints on resources, such as number and areas of expertise of the faculty? Inevitably, as programs dealing with applied linguistics have typically arisen out of, and in most cases remain highly dependent on, departments of English, linguistics, or education, their programs tend to reflect the emphases of the dominant department. In order to think about preparing applied linguists for the future, we must all consider how best to break free of such administrative and dependent disciplinary constraints and expand the faculty expertise in our programs to deal with the widest possible range of preparation called for.

On the other hand, as my title suggests, I do not think that any program to prepare applied linguists can include all possible disciplines. Choices must be made, in part based on the reality that students interested in studying in our field come to graduate school with incredibly diverse types of prior preparation in other disciplines. It is a sad fact of life throughout the world that basic studies in language structure, language learning, and language use not only are *not* a part of the public school curriculum, they are usually not even addressed in basic undergraduate education. Whereas the aspiring doctor or engineer has typically had substantial secondary and undergraduate coursework in biology, chemistry, mathematics, and physics, as well as many other highly technical subjects, applied linguistics graduate applicants have usually specialized in but one of the various disciplines whose principles inform our field.

Therefore, due to the limited amount of time available to provide graduate-level education, we have to limit ourselves in some way. In our case at the University of Hawai'i, our Department of ESL has inclined itself in recent years to confining its educational role to that of what we might call "second language studies" (not only English) in which virtually everything we teach, whether theoretical or practical, might be considered "applied" in some way. We believe that the study of second languages--their learning, use, analysis, and the teaching of them--constitutes in itself a sufficiently broad domain of research, theory, and practice to warrant a focused field of graduate education. Many individuals who consider themselves applied linguists may want to concentrate their studies in first language acquisition, communication, lexicography, computational linguistics, or neurolinguistics.

At Hawai'i, while our students have such options, the field of second language studies is expanding enough in its own right with theoretical models of learning and instruction, specialized research techniques and unique constraints on the applications of other disciplines' techniques, such that the range of courses in which we have expertise and research interests is in itself vast enough to fill our schedules each semester with many regular core and a large number of elective courses. For example, a core, an elective, and a seminar course in each of the five principal areas of the program are: (1) Second Language Analysis--English Syntax, Comparative Grammar and SLA, Text and Discourse Analysis for Reading and Writing; (2) Second Language Use--Sociolinguistics and ESL, Cross-Linguistic Pragmatics, Second Language Ethnography; (3) Second Language Pedagogy--ESL Teaching Practicum, Program Development in ESL, Issues in Pedagogical Grammar; (4) Second Language Learning--Second Language Acquisition, Applied Psycholinguistics and SLA, Task-Based Language Learning; (5) Second Language Research--Second Language Research Methods, Research in Second Language Testing, Advanced Second Language Research Methods. Our orientation is not merely to provide a certain amount of training in techniques and methods for teaching and research; rather, it is to inculcate understandings of principles and critical thinking abilities so that our graduates, when encountering diverse and unpredictable situations and problems, will be able to work out solutions and explore alternatives with the broadest perspective possible.

In the limited time of two to four years of study, I doubt greatly that any student can adequately prepare him or herself for the complexities and indeterminate demands of future work as an applied linguist, much less as a specialist in second language studies. In addition, we must accept the possibility that only a limited understanding of some of the main disciplines associated with our work can be achieved. The best solution to preparing applied linguists, therefore, is to provide a sufficiently balanced introduction to the various contributing disciplines but also a thorough grounding in the basic theories, research methods, and findings of whatever focal area we deem to have the highest priority in our particular institution, whether it be linguistics, second language studies, psychology, or whatever. The field will thus remain multidisciplinary as well as interdisciplinary, although it is my belief that some portions of the field, such as second language learning and teaching, are rapidly becoming "disciplinary." We have only to recall the status, hardly one hundred years ago, of the fledgling field of psychology or the then newly emerging field of linguistics, to realize that we may be on the forefront of a new era of coalescence and disciplinary evolution in applied linguistics.

Training Applied Linguists for the Future

Susan M. Gass
Michigan State University

In reading John Schumann's statements, I was initially struck by the sophistication of our discipline. In a short span of time (roughly 20 years or so) we have begun to come to an understanding of what it means to be an applied linguist and what it means to train applied linguists. What is perhaps especially striking is that most people who are doing the thinking about what should be in an applied linguistics program have not themselves had the benefit of training programs like the one John describes.

The term applied linguistics means different things to different people, so that a discussion of how to train people involves an agreement, or at least an understanding, of what it means to do applied linguistics work. If one looks at the topics which are included in the meeting handbook from AILA [the International Association of Applied Linguistics], or even from the 1992 AAAL meeting in Seattle, one can see a range of academic pursuits, including lexicography, discourse analysis, child language acquisition, second language acquisition, language teaching, and so forth. Some of these are more central to a European tradition while others are more central to a North American tradition. What seems to emerge, for me at least, is that applied linguistics is molded to fit the particular academic interests which are present in any given institution. It is for this reason that there will probably never be absolute agreement on what is appropriate in a training program--other than the agreement which exists in sub-areas of applied linguistics.

In our discussion, besides the issue of defining the field, there are two separate issues: one dealing with the M.A. and one dealing with the Ph.D. In thinking about an M.A. program, one has to first decide what one is preparing people to do with that degree and who the students entering the degree program are. The important questions to consider in this case are: is it intended as a terminal degree or not? Are the students straight out of a B.A. program or have they had a number of years of relevant experience, perhaps in the field of teaching? The program John Schumann describes is one which in his words is "to provide research training in applied linguistics such that graduates would be prepared for doctoral work in this field and ultimately for careers doing applied linguistics research in both educational and non-educational settings." In other words, UCLA is converting its M.A. in TESL to a degree program which is preparatory for Ph.D. work.

While I do not believe that applied linguistics is the same as TESL, I do believe that there are overlapping areas of interest and that each is important as part of an educational package. I do not see that one interest should necessarily substitute for the other. Ideally, they should run parallel to one another, but with different emphases. There are common elements to both kinds of emphasis (e.g., language acquisition, language assessment), but there are also areas of divergence (e.g., teaching methodology for a TESL degree or discourse analysis for an Applied Linguistics degree). I would also add that there are particular university constraints which might guide these decisions. For example, John Schumann mentions that UCLA is a research university. Michigan State University is not only an Association of American Universities institution but is also a land-grant university. This additional institutional identity has implications for the structuring of our programs.

At MSU we are in the process of attempting to deal with the problem of divergent interests by establishing an interdepartmental M.A. in Applied Linguistics. It is our strong belief, and one that we share with John Schumann, that the degree must be interdisciplinary. This degree program is not designed to supersede the already existing M.A. in TESOL but rather serves as a complement for those students in the foreign language departments who are eager for training in language learning/language teaching and for students interested in discourse analysis and sociolinguistics. Each of these programs shares a common core which includes language analysis and research methodology.

On the issue of a Ph.D. program, as I stated earlier, I am in complete agreement with the need to be interdisciplinary in our approach to training. Not many applied linguistics programs in North America have the luxury of allowing as many credits outside the department as the one John Schumann describes. I do feel, however, that this *is* important. A Ph.D. degree in Applied Linguistics needs to build on the base provided through an M.A. degree, a base which may be similar to what John Schumann describes or which might deviate to some extent. But once the M.A. degree is completed, a Ph.D. student needs to focus on *something*, that is, s/he needs to bring to the discipline of applied linguistics expertise from *some* perspective--this may be from linguistics, from sociology, from psychology, from education, or any of the others which John

Schumann suggests--and bring that perspective to bear on a specialization within applied linguistics.

An ideal Ph.D. program, in addition to expanding theoretical knowledge, should be one which offers a significant amount of hands-on experience, since applied linguistics is not an armchair field. All applied linguists must know how to analyze some bit of data, whether for the purpose of studying acquisition, the discourse of the classroom, or language in a professional context. One thing which does seem essential in an applied linguistics Ph.D. program, then, is an emphasis on language analysis. But equally as important is the need for a theoretical base to what we are doing. And that theory, at least at this point in time, comes from outside the field.

Let me end on a cautionary note. One does not want to relegate to secondary status the actual specialization of applied linguistics itself. That is, language acquisition, either first or second, language assessment, and discourse analysis are all areas with rich research traditions. We do not want to run the risk of relegating those domains to positions of secondary importance. The emphasis in a Ph.D. program should be on doing one of those areas from the perspective of some other area. Both must be dealt with in tandem.

Preparing Applied Linguists for the Future at the University of Illinois

Sandra J. Savignon
University of Illinois, Urbana-Champaign

Given our charge to consider the preparation of applied linguists for the future, I've chosen to consider, first, the intellectual thrust of applied linguistics and, second, the organization of applied linguistic programs.

The research agenda of applied linguistics deserves continued emphasis. The term "applied linguistics" has been used for so long to refer to language teaching that for many colleagues in departments of linguistics or languages (English and other, so called "foreign" languages), the term is the antithesis of scholarship and research. Young colleagues often feel well advised to avoid mention of applied linguistics in identifying their professional interests. Better to say one is a linguist, whether one studies philology, discourse, or language acquisition. The scope of applied linguistic research, language use as opposed to language as an idealized morphosyntactic system, is not well understood and suffers from fragmentation in established academic units. And yet a look at the program of the 1992 Annual Meeting of the American Association for Applied Linguistics in Seattle confirms the dynamic interplay of perspectives in research design. Language education, both native and nonnative, remains an important context for applied linguistic research. Discourse analysis, pragmatics, language policy, and native/nonnative language acquisition all offer research perspectives of potential value in addressing educational issues. But language education is clearly only one of many contexts for applied linguistic research.

The very recent emergence of a strong, independent AAAL organization affirms the coherence of a field that for understandable historical reasons has lacked organizational unity in most academic settings.   Researchers with interests in language use hold appointments in departments of English, sociology, anthropology, French, linguistics, Spanish, Asian studies, speech communication, education, psychology.

This multidisciplinary nature of applied linguistics figures prominently in the preparation of applied linguists for the future. No single academic unit, even if it calls itself a department of applied linguistics, can presume to provide graduate students with the preparation they will need to participate in a range of applied linguistic research that is, by definition, multidisciplinary AND, I wish to underscore, multilingual and multicultural.   In this connection, the white anglo North American composition of our panel of discussants gives a misleading impression of these world contexts for applied linguists, many of whom seek advanced training in the United States and the United Kingdom. Recognition of these world contexts is a cornerstone for shaping a quality program in applied linguistics.

The need for outreach and for interacting with related disciplines has been recognized and responded to in a number of ways at different institutions. In his description of the UCLA Program in Applied Linguistics, John Schumann has offered one solution: a common core of studies at the M.A. level followed by options at the doctoral level.   The program in SLATE at the University of Illinois at Urbana-Champaign offers another model.   SLATE stands for Second Language Acquisition and Teacher Education. Our focus is not the   broad   field   of   applied   linguistics   but   the   subfield   of second/foreign/multilanguage acquisition and teaching. The official description of the program reads as follows:

> The multidisciplinary Ph.D. concentration in Second Language Acquisition and Teacher Education (SLATE) is designed to provide advanced training for prospective teachers, researchers, and administrators concerned with second language learning and teaching. The SLATE concentration has the combined support of faculty members in a number of different departments in the University.   Departments include the Departments of Educational Psychology and Curriculum and Instruction in the College of Education and, in the College of Liberal Arts and Sciences, the Departments of English as an International Language, French, Germanic Languages and Literatures, Linguistics, and Spanish, Italian and Portuguese.
>
> The SLATE concentration is administered by an Executive Committee consisting of faculty members from the cooperating departments. The Executive Committee provides direction and guidance for general aspects of the concentration itself and for specific non-course-related interests, such as the SLATE seminar series.

In contrast with the UCLA program, SLATE has been developed as a doctoral program only. We seek to offer a coherent program of study for candidates from diverse backgrounds:

> Generally, candidates in the SLATE concentration whose Master's degrees directly involve second language learning and teaching will have sufficient background in second language learning and teaching. If candidates lack sufficient background, they may be required to take courses to meet this basic preparation. All students in the SLATE concentration will complete a required set of competencies. The competencies include linguistic theory, psycholinguistics and the psychology of language, sociolinguistics and sociocultural analysis, curriculum development, and research methodology. In addition, candidates must complete the Ph.D. requirements of their individual department.

Thus, a Linguistics/SLATE Ph.D. candidate would have a different, yet overlapping, set of course requirements from those of a candidate in French/SLATE, Education/SLATE, or Spanish/SLATE. Graduates are awarded a Certificate in Advanced Study in SLATE as well as a Ph.D. in their home academic unit.

Worth noting in this discussion of developments at UIUC is the recent emergence of a Center for Writing Studies. The center has been created in response to the need for professionals to address educational issues in the development of writing skills. With support from the Vice-Chancellor, a set of courses is being developed for a multidisciplinary doctoral program on the model of the SLATE program. As has been true for SLATE, faculty are being recruited from a range of academic backgrounds, including English and English as an International Language.

Will these programs prepare applied linguists for the future? If job placement record is a valid indicator, the answer is a resounding yes. SLATE graduates have been recruited by the University of Texas, Stanford, Columbia, Purdue, University of Maryland, and Georgetown, as well as UIUC. Graduates of the UCLA and other applied linguistic programs have been similarly in demand. Two recent UCLA graduates, in fact, now hold tenure-track positions at UIUC, and their names appear on the faculty lists for both SLATE and the Center for Writing Studies. The future of applied linguists holds both challenge and promise. Concentrated effort on the part of applied linguists today to bring coherence and definition to applied linguistic research and program development will prepare applied linguists of the future both to meet the challenge and to fulfill the promise.

Preparing Applied Linguists for the Future:
The Georgetown Approach

John J. Staczek
Georgetown University

In his opening remarks to the AAAL panel, John Schumann has very neatly organized the field of applied linguistics into three stages: what the field was, what the field became, and what the field might become. In my remarks, I plan to comment on the validity of John Schumann's views of each stage, confirming them or adapting them on the basis of institutional traditions, of developing student and faculty needs, and of emerging professional demands of the cultures in which applied linguists live and teach and do their research.

Schumann takes a natural perspective, the UCLA perspective and how it has developed applied linguistics, suggesting that the 1978 developmental model was one that included a focus on four tracks: language analysis, language education, language acquisition, and language use. These areas fall properly into what many know as structure, process and methodology, second language acquisition, and the sociology of language. In 1978, when Georgetown's own linguistics program was about 18 years old, the focus was on language learning and teaching in a department that had specialists in methodology, testing and evaluation, psycholinguistics, language analysis (including contrastive analysis and history of the English language), and computational linguistics (machine translation and computer analysis of data). It was in 1968 that language in the context of its users, what we know as sociolinguistics, became a program at Georgetown, a program on more or less equal footing with what has been theoretical (general linguistics), applied linguistics, computational linguistics, and now sociolinguistics.

Unlike UCLA, Georgetown seemed to avoid the need to address the matter of language and education, perhaps because as a Jesuit and Catholic institution, whose tradition has been in the liberal arts and humanities, the process was less important than the discipline. Linguistics & Reading and Linguistics & Writing became staples of the standard applied program and reflected similar foci around the world. Nevertheless, thanks to the sociolinguists who introduced discourse studies, the focus in applied linguistics began to turn toward language use and function in all settings.

It was not until the mid-1980's that Georgetown, through several new faculty appointments, began to focus on language acquisition, variation, writing, and English in emerging new contexts. I have to confess that in a very traditional department of linguistics, it was difficult to introduce new perspectives in linguistics, new applications with which linguists could become engaged. On the more general level, sociolinguistics was one of those perspectives in linguistics; on a specific level, it was English for Specific Purposes and program administration. But at this specific level, we had to call the program administration aspects part of a seminar on ESP to have it run by our colleagues. For the last three years, both ESP and program administration

have been integral seminars in our doctoral program. English in the world context was also added. In a way, we mirrored the older UCLA pattern of language use and language education.

In 1982, a year not unlike the recent period during which the Berlin Wall disappeared and communism became unraveled, Georgetown made some university-level decisions to strengthen certain graduate programs and eliminate others. Linguistics was one of the favored departments and a proposal to develop excellence in applied linguistics with support from computational linguistics and sociolinguistics was advanced and approved. However, the department, with its 1983 resources, was not quite ready to undertake its new mission. Among the new tasks of that mission, more clearly elaborated in 1987, was the marriage of applied and sociolinguistics to the resolution of linguistic issues in teaching and learning contexts, that is, applied classroom discourse, the educational context that Georgetown so easily averted. It was not so much the faculty as it was student interest and student overlapping in courses that led to acquisition, participants, context, and function becoming the proper areas of student and faculty research. At this time, it also became evident to the applied program that our students were coming from settings in which they had taught English or a foreign language and that they returned to those settings to prepare others. Among the different kinds of courses we gave them, however late it must seem, were courses in applied research design, acquisition, English for Specific Purposes, and program administration. English for Specific Purposes--from needs to functions, to syllabus, to methodology, to discourse, to rhetorical styles--became an important organizing course that integrated applied linguistics and sociolinguistics. Program administration--from instruction to assessment, to materials development, to faculty development, to research, to institutional culture--became the norm for supporting teachers who were to become the trainers of others in other university settings.

In 1992, as the Georgetown linguistics program is rebuilding because of a host of orderly retirements, we have turned our focus on reconstituting ourselves with versatile scholars who have a sense of what linguistics is, of how it supports language teaching and learning, and of how it and other disciplines inform our knowledge of language use in a variety of settings.

Applied linguistics at Georgetown may become, in part, what John Schumann proposes that he and his colleagues desire for the UCLA graduate. I believe we want the same kinds of things, that we share the same desire to do more and better research on the teaching and learning process in the context of language use, and that we are looking to the computer as a tool to inform us about cognition, intelligence, and discourse. Moreover, what I see as equally essential is the preparation of the teacher, scholar, manager, and academic leader. That is to say, our applied linguists need to acquire the information that can enable them to use the science of language to solve the problems of users in a variety of contexts. Yet it is these same graduates of our programs who must learn the culture of our discipline, its expectations, and its evaluative mechanisms. While we may teach them to conduct research and communicate it to the professional community, we must also teach them how to lead and manage peers, to seek and manage fiscal resources to support their research, and

to learn to behave in a system that values independence for the advancement of knowledge yet values compromise and cooperation to get the general tasks done.

In other words, we need to add to our programs what economists and business professionals regard as useful to the planning, design, development, and evaluation of successful programs. These graduates, students in our programs, in our cultures, besides linguistics, acquisition, language use, research methods and the like, also need to know how to do the following: (1) how to design, plan, implement, and evaluate a budget, because fiscal and human resources drive academic programs and academic research; (2) how to request and justify instructional, research, and staff positions within established professional levels of remuneration; (3) how to recruit and develop new faculty; (4) how to make instructional assignments; (5) how to evaluate performance, curricula and materials, as well as student, faculty, program, and institutional needs; and, (6) how to participate in a culture of professionals (as coordinators, directors) who are responsible for advancing and communicating the knowledge of our discipline.

At Georgetown we are poised for change. In a department where retirement turnover is a fact of life (half the department in a period of three years), there is opportunity for development and change. And the change will certainly occur as applied linguistics changes in its broader and narrower foci.

Second language learning and teaching have been established areas of inquiry more recently informed by work in language variation and use; in the discourse analysis of settings, participants, and topics; in the language of power and politics; in the language of cross-cultural communication, including gender variation, male/female conversation, female/female conversation, and male/male conversation; in the anthropological, linguistic, and social views of the construction of self and society through language use. Taken together, these areas of applied inquiry remind us of the power of language, the extent of its use for a richness of purpose. In our efforts to understand users using language and language changing for user purposes, we confront an enormous body of data that requires analysis and description. We know more than we have ever known before in the history of man about what language is, and we are beginning to learn more what social and personal needs language serves.

Perhaps an area toward which we ought to organize ourselves and our research in applied linguistic inquiry, as other disciplines are now doing, is in the area of ethics and language use and the ethics of linguistic inquiry. Before continuing, I would like to relate what I consider an important anecdote to support my point about ethics and applied linguistics. I have had the good fortune to have been in the position of Acting Director of the Georgetown University Press since July 1991. The Georgetown University Press is a scholarly press. Among the Press's titles are several in the area of medical ethics. In early February 1991, I had the second good fortune to spend a few hours with the Reverend Kevin O'Rourke, a medical ethicist at the University of St. Louis. As an author whose work we publish, Father O'Rourke began to relate to me one of his most perplexing problems, that of assisting a patient in a dignified death. The patient is on full life support and shows no signs of cognition. She has a living will, the principle of which is not legal in

Missouri. Her attending physician, who is also a physician-lawyer, cannot be persuaded of his patient's right to choice. Fr. O'Rourke is in no way a Dr. Jack Kevoorkian, but like Kevoorkian he believes in the dignity of life and the dignity of death yet cannot persuade a physician-lawyer of the ethics of the patient's request under the circumstances.

Granted, our issues in applied linguistics are not of the same type; that is, they are not usually life-threatening. However, I propose that as linguists, we face another level of ethical issues as they relate to language use: to empowerment and to the development and protection of self in society. Like the physician who relies on language to understand symptoms and psyche so as to address individual health care needs and societal health care issues, like the attorney who relies on language to understand fact, intent, motive, and evidence so as to resolve issues of personal conflict or injury or to reformulate principles and laws to protect the citizens of a society, like the teacher who interprets language use so as to understand the view of a learner's self and the society that defines the self--just as all three of these practitioners are devoting some portion of their thinking and research to the implications for ethical practices in their disciplines, so too do we need to ask ourselves, as applied linguists, about the ethics of practice (teaching and research), of our procedures (data collection and interpretation), and of our outcomes (the dignity, rights, and protection of language users). We now talk of language as an instrument of power and authority, of intimacy and solidarity, of inclusion, exclusion, and affinities, of distancing and connectedness, of use and misuse, and not just of forms, function, and meaning, but of role. Layered within such uses of language is an ethics of our research practice that we must learn to uncover so that when we educate applied linguists to do applied linguistics, we do it with concern for all language users in society.

STUDENT RESPONSES

The following six statements come from graduate students who represent the same six institutions as do the panelists. The statements appear in alphabetical order according to the name of the author:

Facing the Future Now:
Reflections from a Student of Applied Linguistics

Patricia A. Duff
University of California at Los Angeles

An essential part of academic life, I am learning, is the ability to tap into the wonders of the brain's frontal lobe and project oneself and one's research goals into the seemingly distant future. Reminders of this include: (1) deadlines for proposal submissions to funding agencies and conference organizers, sometimes a year in advance; (2) job interviews for academic appointments, at which candidates may be asked to outline 5-to-10 year research agendas as well as their visions for the host department's future; (3) departmental planning meetings dealing with the developments of M.A./Ph.D. curricula, courses, recruitments, tenure concerns, retirements, and so on; and (4) special features such as this, in which selected individuals consider what the future (21st century) has in store for applied linguists, or perhaps more accurately, what those individuals have in store for the future of applied linguists, based on the experiences, commitments, visions, and constraints of their respective institutions and on their own understanding of what applied linguistics is--or should be--all about.

Taking on the future is an ambitious task indeed, especially when one knows how quickly and unpredictably events and circumstances around us may change: budgets freeze; faculty members leave; new ones are hired; departments are shut down; the world order is reconfigured; immigration and demographic patterns are altered; unemployment threatens even those holding new applied linguistics doctorates; and previously non-existent or marginal issues become incredibly research-worthy, while formerly "hot" topics somehow grow cold.

And yet, such surprises, crises, and misjudgments notwithstanding, planning for the future is an extremely valuable, if daunting, enterprise. So, as an applied linguist with one foot already out the door of my host institution, UCLA, I would like to comment on the statements of the six faculty panelists. First, I will refer to John Schumann's opening remarks, drawing upon my own experience, and then I will note some commonalities across the panelists' responses. Finally, I will present some concerns that applied linguistics graduate students have as they now face the future.

John Schumann outlines a new vision for applied linguistics at UCLA, based in large part on historical developments. These include the established (elitist) priority of UCLA to be first and foremost a research institution, which has historically led to an institutional failure to support some its most promising education-oriented TESL/Applied Linguistics faculty members. Unfortunately, the emphasis on education and M.A.-TESL teacher preparation has been seen from "on high" as a liability, precluding substantial contributions to the research community.

It is no wonder that things are changing at UCLA, in light of this campus and systemwide bias, and in the wake of a number of early faculty retirements and some important new hires. But the programs represented by the

other panelists also seem to be changing, growing, and redefining their missions, for a number of related reasons. Obviously, what happens at each institution is inextricably linked to the history of the department and institution, its relationship to other associated departments, faculty expertise and turnover, and to the background, objectives, and numbers of students entering the programs, even to the geographical location and name of the program itself. A degree program in "Applied Linguistics" is, arguably, broader in scope than, say, "Second Language Studies" or "TESL," and therefore poses considerable challenges for the creation of a solid, coherent curriculum, even within one institution, but especially for one with relatively few faculty members and a dearth of other so-called "Applied Linguistics" M.A.-Ph.D. programs for comparison. It may thus be difficult to conceive of a universally valid scheme for "preparing applied linguists for the future," although a certain set of courses comes to mind as being valuable in any program preparing applied linguists (e.g., language analysis and research methodology).

Owing to the timing of my enrollment in the UCLA Program in Applied Linguistics (1987-1992), I experienced only the last phases of an earlier model (and group of faculty members) for the preparation of applied linguists, and only the preliminary stages of the prospective model.[1] Hence, I have not directly benefitted from the proposed curricular and pedagogical changes (e.g., a laboratory-based mentoring system), although as an introductory-course-weary Ph.D. student I would have welcomed many of them, particularly "hands-on" training and collaboration with other research assistants and faculty supervisors on significant (funded) research projects, which a laboratory or research center model would certainly engender.[2] Instead, I received a broad-based (even diffuse) education, with many other interesting and timely opportunities, including state-of-the-art courses ranging from neurobiology to testing to language socialization, and foremost among these was securing a research "laboratory" of my own, thousands of miles away: a set of experimental, secondary-level dual-language schools in Hungary, where I have worked in association with UCLA professor-mentors and Hungarian colleagues for almost three years, dealing with some fascinating problems and issues in that context.[3]

Was I exposed to the vestiges of research and professional preparation related to (second) language education at UCLA?[4] I hope not. Not when most of the applied linguistics jobs advertised this year have sought graduates with a breadth of expertise in various areas, including teaching methodology, skill-area (e.g., writing) instruction, teacher training and supervision, methodology for research in instructional settings, language testing, language analysis (including discourse) and acquisition, and are housed in departments or programs with either "education," "teaching," or "ESL" in their titles. Breadth in theoretical background and pedagogical experience as well as demonstrated research potential appear to be key. And yet, approaches to defining and studying education-related issues also appear to be changing (e.g., away from analysis of performance on decontextualized tasks in strictly quantitative paradigms), and future job descriptions are bound to reflect those changes as well.

Like the first cohort of graduates from the experimental schools in Hungary which I have studied (who will graduate in 1992, still uncertain about

prospects for university admission), students of the new model(s) of graduate education in applied linguistics must understand and be committed to the orientation of the program they choose, seek productive research (and service) opportunities, become current in issues in the field as a whole and accomplished in their own area of specialization, and then hope for the best. The ultimate criteria for judging a program's efficacy, for both the Hungarian dual-language school students and those in or about to enter M.A. and Ph.D. Applied Linguistics programs, are (1) graduates' satisfaction with their education; (2) graduates' ability to demonstrate/apply knowledge both of their areas of specialization and in other areas; and (3) their ability to secure *and* retain (e.g., with strong teaching, research, and publication records) appropriate academic (administrative or research) positions following graduation, assuming that that is their goal. Which universities and departments will accept them? Will they be encouraged to pursue their current interests? Will they be competitive with graduates from more traditional or mainstream programs? These are questions plaguing many students, in both Hungarian dual-language schools and American applied linguistics programs. Time alone will tell, but in the meantime the programs must be carefully monitored.

Most of the panelists highlighted the interdisciplinary, multidisciplinary, even "disciplinary" nature of applied linguistics as well as the advantages of working alongside colleagues in other disciplines. This point is indisputable. However, cross-disciplinary collaboration also depends on individual institutions and evolving relationships across and within departments. In the extreme case, sending students out for specialization in other disciplines, yielding low class enrollments and high overhead in the source/host department, might tempt financially strapped administrations to slash funding, perhaps even the departments themselves. For a department to appear somehow redundant or expendable within a university system would be disastrous. Furthermore, we do not yet know whether those who manage to get first-class specialist training in other disciplines will want or be able to return to applied linguistics departments (or compatible/equivalent programs) later on. They may be too specialized for small, conventional TESL/applied linguistics-type programs (or even for mainstream journals), while lacking a degree from the specialist department they may be considered inappropriate for positions there. Will such students become the academic homeless? Or will tolerant, new interdisciplinary programs (which seem to be on the increase) house them in the future?

Several panelists underscored the accountability of programs to society and its various language-related ills. I agree fully that in both educational and other sectors there are a host of relevant and interesting research questions which need to be addressed and crucial services which need to be rendered. One would hope that many future applied linguistics students and graduates will choose to focus on important "real world" issues in addition to more abstract, intellectual issues, though I do not mean to suggest that the two are mutually exclusive. But to do this, they must be equipped with the requisite skills to work responsibly in applied areas and should be encouraged to ask questions of interest, not only to themselves but ideally to society and their field as well.

Finally, questions not dealt with by the panelists are: What do aspiring applied linguists see as their own future needs and goals? Where do they want to be placed? Which sorts of issues do they want to deal with and in which countries or communities? Are they confident that on the basis of their graduate-level education they have the resources and experience to deal with the range of future challenges awaiting them? And what exactly are those challenges? Perhaps a continuing survey of recent and future graduates and their perceptions regarding their own preparation as applied linguists would be timely and useful to both planners and students and would give a voice to those most directly affected by developments in our field.

Preparing Applied Linguists for the Future:
A Need for Collaboration

Rebecca D. Freeman
Georgetown University

In his opening statement, John Schumann suggests that "a real linguistics has to get beyond simply seeking solutions to educational problems." To expand the field, the new UCLA Applied Linguistics program he describes will prepare graduate students to do interdisciplinary research of language-related issues in any setting. Professors Savignon, Chaudron, Gass, Staczek, and Beebe all agree that applied linguistics encompasses more than language teaching and learning, and that graduate programs must emphasize interdisciplinary research. However, the specifics that they each address illustrate a range of concerns for and contributions to the future development of the field. I will comment on each professor's response by adding my perspective as a former graduate student in an M.A. TESOL program, and, currently, as a Ph.D. candidate in the sociolinguistics concentration of the linguistics program at Georgetown. My response is informed by my experiences as an ESL teacher in a variety of contexts and as a researcher who uses an interdisciplinary approach to undertake research in multilingual and multicultural education settings.

Sandra Savignon and Craig Chaudron both maintain that the field of applied linguistics is too broad for one graduate program to adequately prepare students for research and practice. According to Savignon's statement,

> No single academic unit, even if it calls itself a department of applied linguistics, can presume to provide graduate students with the preparation they will need to participate in a range of applied linguistic research that is, by definition, multidisciplinary, AND, I wish to underscore, multilingual and multicultural.

As a result, the multidisciplinary SLATE program at Illinois, which emphasizes both research and teacher training, is limited to the subfield of

second/foreign/multilanguage acquisition.   Chaudron mentions numerous practical considerations, including administrative and disciplinary constraints, number and expertise of faculty, time, and academic preparation of incoming students, that together force a program to be more limited in scope.   In his statement, he suggests that

> The best solution to preparing applied linguists, therefore, is to provide a sufficiently balanced introduction to the various contributing disciplines but also a thorough grounding in the basic theories, research methods, and findings of whatever focal area we deem to have the highest priority in our particular institution, whether it be linguistics, second language studies, psychology, or whatever.   The field will thus remain multidisciplinary as well as interdisciplinary, although it is my belief that some portions of the field, such as second language learning and teaching are rapidly becoming "disciplinary."

In the case of the Department of ESL at the University of Hawai'i, the emphasis is on second language studies.   While I agree that the SLATE program and the ESL program that Savignon and Chaudron respectively describe are legitimate responses to the challenge of providing graduate students with interdisciplinary training in the theory and practice of language teaching and learning, I disagree that the constraints they discuss necessitate a more limited program.

As a graduate student, especially in a field as young and growing as applied linguistics, I do not expect any graduate program to take full responsibility for teaching me all of the information I need to become a researcher and practitioner in the field.   Rather, a program should provide graduate students with the means to take responsibility themselves for solving whichever language-related problems interest them.   Chaudron has suggested providing students having little or no background in applied linguistics with "a thorough grounding in the basic theories, research methods, and findings of whatever focal area we deem to have the highest priority in our particular institution."   However, I think this approach may unnecessarily bias students toward pursuing the research agendas of their professors and following them uncritically in the same research paradigm, resulting in a state of affairs which may not contribute to the evolution of the broader field of applied linguistics.

Chaudron's observation that second language teaching and learning are rapidly becoming disciplinary is representative of what I consider an institutional problem that will have to eventually be addressed.   Researchers in distinct disciplines who are investigating similar language-related problems find themselves segregated in their departments, making dialogue and collaboration unnecessarily difficult and rare.   Instead of encouraging the emergence of new disciplines, I think a more productive approach for an applied linguistics program to take, given present-day institutional constraints, would be to provide a forum, perhaps in an introductory course, in which students and teachers could collaborate in their attempt to answer the question "What is Applied Linguistics?"   Similar

in concept to the laboratory system that Schumann describes for UCLA, this forum would ideally provide students with an understanding of the scope of the field, the kinds of questions that researchers ask, and an introduction to the theories and methodologies of the various contributing disciplines. This dialogue would also provide students the opportunity to critically reflect on existing research paradigms and how they together can offer triangulation of perspectives. Several of what Chaudron identifies as constraints on programs could then be reconceptualized as assets. For example, given that most applied linguistics graduate students begin with little or no background in linguistics, and given that numerous disciplines contribute useful insight and methodologies that linguists have not traditionally employed, students who have not already been indoctrinated into one paradigm tend to be more open to new perspectives. In addition, many of the students, because of undergraduate backgrounds in one or another of the contributing fields, have expertise which can be drawn on. Furthermore, as students are encouraged to take a more interdisciplinary approach, they will demand more interdisciplinary training, which will force institutions to restructure themselves to make collaboration across disciplines easier.

Michigan State University's approach to the broadening scope of the field is to offer parallel but distinct graduate programs: an M.A. in TESOL, and an M.A. and Ph.D. in Applied Linguistics. Both programs require courses in language acquisition and language assessment, but as Sue Gass says, "There are also areas of divergence (e.g., teaching methodology for a TESL degree or discourse analysis for an Applied Linguistics degree)." She suggests that sociolinguistics and discourse analysis are thus required only for those students interested in applied linguistics but are not necessary for TESOL degree students.

Gass's description of Michigan State's M.A. TESOL program reminds me of the M.A. TESOL program I graduated from in 1986, and, according to Conklin's (1991) review of M.A. TESOL programs (cited by Chaudron), is not uncommon. That program emphasized teaching methodology and the structure of the English language. Given the lack of attention to sociolinguistic factors, my training implied that teaching in any context was the same and that there was no variation in the English language. Through my experience of teaching ESL to radically different populations with distinct needs in a variety of contexts, I have learned that consideration of sociolinguistic factors, including who the students are, where they come from, what their needs are, etc., is crucial to developing appropriate curriculum content and classroom organizations that enable students, regardless of background, to participate. I found that my TESOL training in methodology and English structure did not prepare me at all for the diverse populations and contexts I would later encounter.

John Staczek's description of the evolution of Georgetown's applied linguistics concentration indicates his agreement with Schumann that there is no problem in training students to do interdisciplinary research on language-related issues in any setting. Through my training in sociolinguistics and discourse analysis at Georgetown, complemented by my training in ethnographic research in an anthropology program, I have developed an interdisciplinary approach to analyzing how language functions in any context. While there is no emphasis in the sociolinguistics concentration on educational research, because of my own

background and interests, I have chosen to do applied sociolinguistic research in educational settings.   Although the traditional emphasis in the applied concentration has been on language and education, my peers in that program are also doing applied sociolinguistic research in areas such as language and gender, language in the Gay community, World Englishes, and cross-cultural differences in speech acts. It seems that the boundaries between concentrations are becoming more and more blurred.

I am in complete agreement with Staczek and Beebe's concerns for future applications of linguistic research. Staczek's statement that

> [w]e now talk of language as an instrument of power and authority, of intimacy and solidarity, of inclusion, exclusion, and affinities, of distancing and connectedness, of use and misuse, and not just of forms, function and meaning, but of role

describes the kind of expertise that Beebe maintains "is crucial to the future of multi-ethnic nations." This recognition of the constitutive nature of language must inform any applied linguistics or sociolinguistics program. Like Staczek, I think we need to concern ourselves with the ethical implications of our research practices, procedures, and outcomes, and, like Beebe, I think we have a social responsibility to use our expertise to influence policy and promote social change.

In conclusion, I think that this dialogue between universities, and among students and professors, represents what is necessary to push the field of applied linguistics forward.   Collaboration across disciplines and across generations will bring new perspectives, including a broader range of research insights and methodologies so that we can forward our understanding of the social world. Given the general move in the social sciences toward the social constructivist paradigm in which language figures prominently, I expect that as applied linguists, we will be increasingly called upon to share our expertise.

A Response to the Panel on "Preparing Applied Linguists for the Future"

Linda Lane
Teacher's College of Columbia University

The statements from the six faculty panelists reveal both a remarkably unified view of applied linguistics, given its youth and interdisciplinary nature, and a desire to strengthen the independence and scholarship of the field. I would like to address three topics raised by the panelists: first, the issue of core curriculum; second, future directions for applied linguistics; and third, the interdisciplinary nature of the field. From my point of view as a graduate student in a doctoral program in applied linguistics, these issues prompt three

questions: What should any applied linguistics student know? What should an applied linguistics student expect to do professionally? and How can applied linguistics students gain the interdisciplinary perspective demanded by their specialization?

The extent to which the panelists agree on what constitutes a core curriculum in applied linguistics reflects a view of what the field is. I had given this question little thought, knowing only that the applied linguistics program at Columbia Teachers College was the one in which I could receive training in my interest, acquisition of second language phonology and second language speech perception. Once in the program and taking courses, I was struck by the enormous range of inquiry and endeavors that fell within the boundaries of applied linguistics, and I wondered whether there was anything dealing with language use that could not be called applied linguistics. Reading the various descriptions of core curricula or requirements at the institutions represented by the panelists was for me like the proverbial turning on of the light bulb--*this* was what applied linguistics was. Moreover, taken together, the descriptions shaped a foundation that seemed exactly right: an applied linguist should know about the structure of language (referred to in the statements as language analysis or linguistics), about the acquisition of language, and about the use of language in context. One or more of these areas is basic to any of the interdisciplinary perspectives applied linguistics can take, and together they form a core which distinguishes applied linguistics from most departments of English, linguistics, or TESL. These three areas--structure, acquisition, and use of language--are mentioned by all the panelists as important requirements in their programs.

The discussion of the future of applied linguistics and the future for applied linguists focuses on two related issues which are aimed at increasing the independence and prestige of the field. Several of the panelists state that research efforts in applied linguistics need to be expanded and improved; in addition, the appropriateness of the traditional close association between applied linguistics and education departments (especially teacher training) has been questioned. Although all of the panelists included as an important aim of their programs the training of researchers in language acquisition or education and the training of language teachers or administrators of language programs, several express the desire that applied linguistics loosen its traditional ties with the field of education and concentrate instead on expanding and improving research efforts. John Schumann states that many aspects of applied linguistics should be "free from concerns about language education," and this reorientation away from the field of education is reflected in UCLA's decision to convert its M.A. in TESL to an M.A. in Applied Linguistics, a degree intended to prepare graduate students to enter a doctoral program which trains them to become applied linguistics researchers, rather than teachers or teacher trainers. John Staczek mentions the desire to "do more and improve research on the teaching and learning process in the context of language use." Sandra Savignon emphasizes the need for an expansion of contexts for applied linguistics research, adding that because of its association with teacher training, applied linguistics has been viewed by some as "the antithesis of scholarship and research." Indeed, the programs described reflect this distancing of applied linguistics and education: only half the

panelists specifically mention a core component of language pedagogy and teaching methodology. Leslie Beebe, on the other hand, expresses her desire that applied linguists continue to keep educational needs as one of its priorities.

I would like to comment on the "research" and "education" issues from my perspective. First, I am already an ESL teacher. I did not enter the doctoral program in order to learn how to teach but to learn how to do research in my particular area. In that context, my experience has taught me that acquiring the tools for doing research needs more emphasis than it has been given. A single course in statistics or design is not adequate for many types of linguistic data. In my own case, after two design courses and three statistics courses, I am hopeful (though still not certain) that I will be able to complete my research and analyze my data. I fully agree with Susan Gass that every applied linguist should be able to analyze language data; however, in addition to a solid foundation in linguistic analysis, the applied linguist also needs a solid background in research design and data analysis. I believe that providing for this background will do as much to improve the quality of research as expanding research contexts beyond educational matters. I also believe that an emphasis on research will lead to the development of appropriate theoretical models; as Gass states, these currently come from outside applied linguistics and, in many cases, are inappropriate for language use.

The question of how closely applied linguistics should be tied to education or whether teacher training should be one of its aims is, I think, an issue that must be decided at each institution; as Beebe suggests, the diversity reflected in applied linguistics programs is a strength. In any case, as long as language acquisition and language use are part of the basic domain of applied linguistics, research in these areas will often have either potential or actual implications for language teaching and learning. It is also likely that many graduate students in applied linguistics will be employed as teachers of language or trainers of language teachers. At Columbia, there is a growing awareness that the quality of foreign language teaching needs to be improved, and that coordinators of language teaching (as opposed to literature teaching) should have a background that includes the domains of applied linguistics. It is not at all surprising to me that graduates of Illinois' SLATE (Second Language Acquisition and Teacher Education) Program are in such high demand.

Thirdly, I would like to bring a graduate student's perspective to the panelists' statements about the interdisciplinary nature of applied linguistics. That applied linguistics is interdisciplinary accounts for the richness of the field but also poses problems for programs which train applied linguists. My experience with courses in other departments (e.g., speech pathology, psychology) has been somewhat disappointing: the lower level graduate courses are generally broad enough to touch on areas of interest to an applied linguist; the more advanced courses, however, are directed almost exclusively toward those majoring in that department. Although it may not be practical to have "interdisciplinary" courses, it may be possible to offer short seminars by faculty members from other departments that address relevant areas of their field from the perspective of applied linguistics. Another approach might be an expanded sort of mentoring system like the one described by Schumann at UCLA.

Finally, I would like to see an "Introduction to Applied Linguistics" course, which would survey as broadly as possible the disciplinary and interdisciplinary areas of applied linguistics, offered to both graduate and undergraduate students. Because applied linguistics is so interdisciplinary, scholarship in the field requires not only the depth of a specialization but also familiarity with the breadth of the field. Such a survey would make students aware of areas with potential relevance to their own specialization and, at the same time, would promote recognition of the field as a field in its own right.

Renaissance People or Tomatoes?

India Plough
Michigan State University

At issue in this panel discussion is the varying conceptions of what constitutes the prototypical applied linguist. Neither the necessary nor the sufficient conditions of what it means to be an "applied linguist" are totally agreed upon. Further compounding this vagueness is that not only is the list of peripheral disciplines relevant to applied linguistics continuing to expand but also what were once considered to be core disciplines may now be peripheral and vice versa. Additionally, a definitive set of criteria for distinguishing one from the other is lacking. What are the implications of this state of affairs for the goals of graduate students?

It is first necessary to state what I believe to be our short and long-term goals, which are not necessarily mutually exclusive. Obviously, our immediate objective is to obtain the Ph.D. degree within a reasonable length of time. While working toward that goal, we also want to keep our future marketability in mind. Superimposed on these is the constant maintenance of professional integrity by conducting well founded research and thus ensuring the survival and expansion of the field.

Is it possible to achieve these goals within the programs of applied linguistics described by the panelists? As graduate students, we are expected to be researchers, students, and teachers. I do not think it is reasonable to assume that quality work *in a reasonable length of time* will result if these categories are expanded to include multiple disciplines. For example, my required coursework (which does not include the classes I audit) will most likely continue a year beyond that of my classmates as a result of my attempt to incorporate several disciplines within my own program while preserving a core concentration in Second Language Acquisition.

Given my coursework, it should be obvious that I do not advocate a graduate student restrictively following a single perspective. Once valid connections between our field and other disciplines have been shown to be relevant, those connections cannot be ignored and severed. For the benefit of our profession and for our own marketability, it is incumbent upon us to keep abreast of the advancements in those various disciplines which contribute to our

field, even if our particular institutions do not offer specific courses in those areas. This is not to say that we must or can be experts in every discipline which comprises our field. However, if we choose to delve into another area, it is essential that we possess a clear understanding of the principles with which we are dealing. Erroneous analyses or poorly designed projects and the premature conclusions and overgeneralizations which might be made based on those analyses and projects rob a field of credibility. They also hinder progress in a field, since future research based on them may be misdirected and ill founded.

Just as uninformed research would be disastrous to applied linguistics, so would it be if too many of us decide to concentrate on more well established disciplines and pursue careers in those areas. This observation relates to our ultimate goal, namely, the survival and expansion of the field. Perhaps we should emphasize that our field, however ill-defined at present, can provide unique and viable contributions to other disciplines. And, somewhat ironically, it could be that through our interactions with other academic areas, we will not only arrive at a clearer definition of what constitutes applied linguistics but also attain relatively independent status.

The Selection and Justification
of Training Programs in Applied Linguistics

Peter J. Robinson
University of Hawai'i at Manoa

A Language of Criticism

Was the recent colloquium on training applied linguists for the future an assumptional debate (Kuhn, 1970) adequate to the problem it intended to address? I think not, though one continues to be needed. The faculty position papers in this special feature fail to deal with the complexity of the issue of applied linguistics course design on two counts. Firstly, and I will deal only briefly with this, no papers, apart from Craig Chaudron's, cite literature from any domain and most rely on anecdote and intuition to justify their argumentation. One respondent, Leslie Beebe, enjoins us to call her "a child of the sixties" as part of the support, one supposes, for the position she adopts. Another, John Staczek, devotes a large portion of his reply to an anecdote about the ethics of medical practice and suggests applied linguists should beware of unethical research. A third, Sandra Savignon, quotes extensively from her department's program descriptions. While information about course requirements is important, this could have been condensed and time devoted to other issues.

What are the other issues? I take it that course design, in any sphere, is a theoretical activity that takes place within an educational context. Why not, then, refer to concepts from mainstream educational theory or analogous issues in the validation of scientific theory in general: e.g., Laudan (1986), whose ideas about the problem-solving value of theory could usefully be applied to

debate about the role of applied linguistics research departments in the larger community; Manicas (1987), whose discussion of realist philosophy of science could be extended to research in the applied linguistics domain as well as its aims and limitations; or Laclau & Mouffe (1985), whose analysis of the hegemonic structure of political ideologies could usefully be applied to a historical examination of why certain departments (e.g., Michigan, Edinburgh, UCLA) achieved the leadership they did in applied linguistics, then declined, and so on. The panelists' general failure to refer to secondary sources suggests to me an unwillingness on their part to think through the larger context of the debate and leaves us as respondents and readers without the sophisticated discourse and frames of reference necessary to do justice to the topic. What we need, in other words, is a language of criticism--not anecdote, injunction, and personal preference.

The Training Process

Secondly, the debate seems insufficiently complex on another count, since course content is treated as the most important issue (as in previous discussions of the "interdisciplinary nature of applied linguistics," e.g., Brumfit, 1980). However, this, for me, is a secondary, dependent issue. Arguments over what constitutes relevant course offerings are meaningless unless situated within arguments about *who* are selected to take them and *what* they are expected to do upon exiting from training. Little reference was made by any of the participants to these issues: the selection of candidates and the justification of course content in light of candidates' eventual purposes. We need facts about both of them to determine course content. Course design is, or should be, based on observational phenomena, i.e., facts about the nature of the clientele for training programs and about specification of the clients' purposes in taking training programs, as in all ESP courses. Sadly, none of the panelists, apart from Chaudron, report on efforts to document observational phenomena of this kind, but such efforts are essential if we are to legitimize discussions about course content, with which most of the panelists' discussion was taken up.

Candidate Selection

Training applied linguists is a complex process consisting of three interrelated problematics--who to select, what to offer them in terms of curricular options, and how to test them at the end of the program. The final stage in this process, I suggest, is hegemonic with regard to the other elements; it involves assumptions, which deserve to be properly documented and debated, about what the relevant areas of professional activity and modes of inquiry are, and how expertise in them is developed by the courses offered to students. Further, given that places in graduate programs are in short supply, decisions about who to accept should also be made with reference to these assumptions. For example, have applicants shown prior interest in these areas and are they likely to be able to fulfill the exit requirements and their eventual professional responsibilities

effectively? The following model illustrates the interrelationship among these stages:

candidate selection -------> course offerings -------> exit to purposive domain

Entry to the University of Hawai'i's Ph.D. program in Second Language Acquisition is competitive, with only 5-10% of applicants being successful, up to a maximum of five students per year. Admission decisions are based on five factors: GRE scores, completion of a rigorous M.A., academic references, relevant scholarly publications, field experience, and a statement of purpose explaining how the applicant would utilize her or his training. Since the Ph.D. program began three years ago, there are now nine students enrolled. These nine have M.A.'s in ESL, TESOL, speech pathology, linguistics, applied linguistics, and education. Our policy is not to restrict the interpretation of relevant M.A. degrees to these fields, but to consider applicants from such diverse fields as anthropology, linguistics, and psychology. However, there are limits on what one could consider relevant (literature would not be), and this is an interesting area of assumptional debate. Of the nine students, five have had substantial overseas experience in teaching English, two have had some experience, one has been involved for some time in bilingual education, and one has done research in, and practiced, speech pathology. There are limits, too, on what one would consider relevant experience, and again this is an interesting matter for debate.

None of the panelists discussed selection criteria in any detail. Staczek mentions that the norm for Georgetown is to accept students with second language teaching experience. Savignon mentions that M.A. work in second language teaching and learning is preferred but not essential, while Gass also mentions the need for an M.A. in applied linguistics. Most striking, to me, is John Schumann's proposal that M.A. training at UCLA itself serve as the prerequisite for entry to Ph.D.-level research, since this appears to rule out decisions about acceptance based on the criteria of post-M.A. experience and publication effort. Also, it appears to limit UCLA's Ph.D. entrants to those students who have completed the M.A. there. The consequence of this, it seems to me, is to restrict intake to specialists in UCLA's approach to applied linguistic study (which is not the only approach) and to deny to those working in "the field" who were trained at the M.A. level elsewhere the chance to compete for entry to the Ph.D. program. Such a policy is at odds with Hawai'i's policy, which is to encourage applications from graduates from a range of relevant disciplines, and, I suspect, it is also at odds with the policy of the other departments represented at the colloquium. I was surprised that it provoked no reaction from the other participants.

Training Purpose

Why are applied linguists being trained? Schumann observes that one need which UCLA responded to in the past was "to train people who would become teachers and trainers of ESL teachers." Schumann then goes on to claim

that because there are now more programs in California and the U.S. as a whole fulfilling the same function, "it is time for us to do something new for the field." It is hard to follow the destructive logic of this argument. The Harvard Business School, to draw an analogy, is hardly likely to close because M.B.A. programs have proliferated throughout the U.S. in recent years. Further, that there are more university departments involved in training ESL professionals is surely an argument in favor of maintaining the flow of qualified personnel to staff those departments in the future. There certainly seems to be a demand for trained applied linguists with expertise in these areas, as a glance at the job opportunities section of the *TESOL Newsletter* and *LSA Bulletin* will show. With what justification, then, has the UCLA department decided to ignore this demand in favor of doing something "new"? Perhaps the new direction Schumann speaks of will be to train applied linguists in areas for which there is no demand.

Other participants comment on the diversity of practical applications that applied linguists need to be trained to address. Chaudron comments that, short of a serious international survey of needs all that can be said is that "there are increasing calls for expertise in a very wide range of applications." Staczek speaks of "the need to solve the problems of users in a variety of contexts." Most participants, apart from Schumann, though, see educational concerns as core issues: Beebe speaks of pressing educational needs, such as "the development of literacy," as areas in which applied linguistics can work, while Staczek observes that a large part of applied linguistics training at Georgetown has been oriented to preparing graduates "to become trainers (of teachers) in other university settings." Savignon notes that, at Illinois, the development of a writing center was a response to "the need for professionals to address educational issues in the development of writing skills."

While I accept that it is possible for applied linguists to work in very diverse settings on diverse topics, it appears from the comments of most of the participants that educational settings and topics are focal. Such a focus argues for a role for courses in pedagogy to supplement courses in other applied domains such as language use, acquisition, and analysis, even at the Ph.D. level. At the very least, trained applied linguists need to be aware of some of the constraints on implementing research findings in tutored settings.

What are individual students' purposes in taking Ph.D. programs? At the University of Hawai'i, seven of the nine students in the program see themselves teaching applied linguistics at the graduate level, in a university or college of education, when they graduate. One sees himself taking an advisory position in teacher education. Another sees herself working in an advisory capacity outside a university setting, developing government-funded educational projects.

An issue not addressed by participants (but of great interest to graduate students themselves) is the assessment end of the training process. And here I would like to make a suggestion. Typically, assessment of graduate students is made through indirect measures of ability to function as applied linguists in research settings. These measures are usually performance on comprehensive exams and completion of the Ph.D. dissertation. Perhaps we need to accompany

these indirect measures with more direct performance measures of ability to function in the applied linguistics setting, and these would, of course, be largely domain-specific. To take the majority of students in the Hawai'i program who wish to teach applied linguistics upon graduation, three performance measures that come to mind are the ability to give papers at conferences, the ability to get research published in refereed journals, and the ability to teach applied linguistics at the university level. How might credit for performance on these tasks be integrated into the overall assessment procedure? This, again, is an interesting area for debate, but one not covered during the colloquium.

Course Content

Most of the debate at the colloquium focused, as in previous discussions of the topic, on the interdisciplinary nature of applied linguistics and the need to offer courses on a wide range of topics. I have already indicated that I feel this focus to be misplaced, since course content can only be realistically determined in the context of prior decisions about who to accept and what the purposive domains of trained students are. One danger, as Sue Gass points out, is that "applied linguistics is molded to fit the particular academic interests which are present in any given institution," for example, ESP and gender issues at Georgetown or language and power at Columbia. Ideally, a department of applied linguistics would be able to offer internal courses and seminars in all the core areas (language use, analysis, pedagogy, and acquisition) without referring students to other departments. The advantages of this situation, which is largely true of Hawai'i, are that the relevance of feeder disciplines (e.g., linguistics, psychology, philosophy) to applied issues is continually demonstrated. Secondly, internally offered courses provide richer contexts for student discussion since applied linguistics students' concerns are more similar than the concerns of students from non-interdisciplinary departments, such as linguistics or psychology.

The position I have just argued, it should be noted, is opposite to the position taken by Schumann. Schumann reports that future Ph.D.-level applied linguistics training at UCLA will consist of only one course taken internally. Other courses would be taken outside the department. While this would definitely provide students with the opportunity to be as interdisciplinary as they want, one wonders how cohesive the coursework students take will prove to be and whether their focus will remain on applied linguistics issues, since the faculty teaching them will not have been trained in applied linguistics. One wonders, also, whether a department offering such a one-course program could properly be called a department of applied linguistics at all.

Preparing Applied Linguists for the Future

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In his statement on training applied linguists for the future, John Schumann states that "we should be able to have an applied linguistics that in many of its enterprises is free from concerns about language education." He describes how the M.A. TESL program at UCLA is being converted into an M.A. in Applied Linguistics which does not include a component called "language education." The reasoning given for this change is that an applied linguist only needs to know how language is acquired, how to test language proficiency, and how to analyze interaction in language classrooms in order to do research in language education.

However, John Staczek, as part of his argument, states that the preparation of an applied linguist as teacher, scholar, manager, and leader is essential. This position, unlike the previous one, which only considers the applied linguist as researcher, more closely resembles what I consider necessary for the training which ought to occur in an applied linguistics program. Of course, as Craig Chaudron mentions, it is difficult, if not impossible, to train applied linguists fully in two to four years of graduate study. Yet, defining the scope of applied linguistics too narrowly in the core of an M.A./Ph.D. program can lead to the deemphasizing of important aspects of applied linguistics.

A more integrated approach considers language education course work, such as curriculum development/evaluation and language testing, to be an integral part of applied linguistics and would require students to have at least one course specifically related to language education in the core requirements of an M.A./Ph.D. program in applied linguistics. Even if students do not plan to do this type of research in the future, they are at least introduced to a practical area of applied linguistics which is too often ignored to the detriment of language classroom research. As Leslie Beebe states, though not all applied linguists need address their research to it, we must provide for practical language education in our applied linguistics curriculum.

As a candidate both for the Ph.D. in Linguistics with an emphasis in Applied Linguistics and for a certificate of advanced doctoral study in SLATE (Second Language Acquisition and Teacher Education) at the University of Illinois, Urbana-Champaign, I have taken a core of courses that introduced me to interdisciplinary areas of applied linguistics (as described by Sandra Savignon) and have also been able to focus on the interaction between language acquisition research and language education. The SLATE program required core includes classes in language analysis (either syntax or phonology), language acquisition (psycholinguistics or the psychology of language) language use (sociolinguistics or the sociology of language), research methods for language analysis (both quantitative and qualitative), and language education (curriculum development across a variety of languages). Because SLATE is a doctoral-level certificate, I was able to complete the Ph.D. from a linguistic perspective while taking

advantage of the multidisciplinary, multicultural, and multilinguistic nature of the SLATE program.

A student in the Department of Linguistics at the University of Illinois who is not pursuing a SLATE certificate but who is working on an applied linguistics emphasis is usually not encouraged to take the language education or research methods courses. In my opinion, this creates an applied linguist who has not been introduced to a major part of the applied linguistics field. Not all applied linguists want to do language education research, but it is certain that they will encounter this type of research in applied linguistics journals and at applied linguistics conferences; it is necessary, therefore, for them to have at least some familiarity with what is occurring throughout their discipline.

Something is missing in the UCLA stance which conceives of an applied linguist as only needing to take language acquisition, language assessment, and discourse analysis in order to undertake or understand language education research. The goal of this research, as Beebe states, is, or should be, to address social and educational issues of national and international concern. Applied linguists should indeed be trained to view the big picture. But leaving language education courses out of the core curriculum of an applied linguistics program allows applied linguists to ignore the applications of their research. Certainly, as Beebe states, not all research needs to or should have a section on pedagogical applications. However, the opportunity to apply research always exists. If some applied linguists are trained without a single course specifically geared to language education, they will have difficulty understanding that other applied linguists want to apply research to actual classroom settings. To illustrate this gap, here is a short anecdote from a seminar talk I heard as part of the SLATE seminar series. After the invited applied linguist presented his model of what may occur in the brain as someone acquires a second language, he opened the topic to discussion. One applied linguist from the Spanish SLATE program asked, "How does this apply to the second language classroom?" The answer was: "I am not interested in that. Applied linguists are just not interested in that." However, the student who asked the question, as well as other applied linguists in the audience (including me), **were** interested in **that**.

Thus, the core requirements of any applied linguistics program, whatever the emphasis, should include basic classes in the areas of language analysis, language acquisition, language use, and language education. As applied linguists, we realize that our field is still growing and forming itself into an independent discipline. In order for this to happen, however, applied linguists must be trained, at the very least, to understand, if not to research, how linguistics and applied linguistics support language teaching and learning.

I am also concerned about how applied linguistics programs train students with regard to professional concerns. Even if students are trained to be researchers and not teachers, the reality of our field is that they will be both after they finish their degrees. Indeed, all the faculty members of the panel are themselves both teachers and researchers. I have been part of a mentor-protégée relationship which has helped me tremendously to gain expertise in areas of professional concern, such as participating in conferences, writing grant proposals, and serving on departmental committees. Yet, though most applied

linguistics students have academic mentors, they do not always receive this type of professional assistance. Two ways mentioned by the panel members to provide for this type of training are the UCLA laboratory model and the Georgetown classes in E.S.P. and program administration. Certainly these types of practical training must be part of every program in preparing applied linguists for the future. From our first days as applied linguistics students, we need to learn about joining and participating in professional organizations. We need to learn how to write abstracts, curricula vitae, and grant proposals. We need to learn what is expected of us on departmental committees and how to evaluate candidates for jobs. We need to learn how to develop course materials, evaluate curricula, train and supervise teachers. All of these are responsibilities we will face in our future and thus they need to be incorporated into the applied linguistics curriculum whether formally or informally. Some of this training can be achieved by requiring students to take education courses, by including students on departmental committees, and by awarding supervised teaching and research assistantships to students. However, in most departments, these essential professional skills are usually acquired through a hit-or-miss method, if they are acquired at all.

Since applied linguistics is a new and growing field, programs to train applied linguists in the future will no doubt change and grow as the field changes and grows. My foremost concerns at the moment, however, are that the interdisciplinary and multidisciplinary nature of applied linguistics be reinforced in the core courses of M.A./Ph.D. programs and that more attention be paid to developing the professional requirements of graduate students who will one day be professional applied linguists.

CONCLUSION

Has this discussion, prompted by the panel, been useful? I feel it has, even though the outcome is not in any way definitive, because important questions and issues were raised. First, I'll comment on the statements made by the panelists and then on those from the graduate students.

At the most general level, Beebe raises the issues of social and educational responsibility in applied linguistics, and Staczek raises the issues of professional ethics and the professional preparation of future applied linguists. We all need to consider to what extent these concerns can and should be addressed in our academic programs and to what extent these are personal, individual matters.

Chaudron and Gass both refer to institutional constraints and mention that local foci and needs will inevitably color any present or future program designed to prepare applied linguists. We should, I

think, welcome the diversity of program offerings that results from these differences. On the other hand, Chaudron quite rightly suggests that we "all consider how best to break free of such administrative and dependent disciplinary constraints and expand the faculty expertise in our programs to deal with the widest possible range of preparation called for."

Continuing with organizational concerns, Savignon reminds us of the multidisciplinary, multilingual, and multicultural nature of applied linguistics and argues, "No one single academic unit, even if it calls itself a department of applied linguistics, can presume to provide graduate students with the preparation they will need to participate in a range of applied linguistic research." These are academic and administrative concerns that applied linguistics programs must address as creatively as possible so that we can achieve Savignon's proposed "coherence and definition to applied linguistic research and program development."

Finally, in a matter relating more specifically to training or curriculum, Gass rightly says that any ideal program should offer "a significant amount of hands-on experience, since applied linguistics is not an armchair field."

The student responses give us a different perspective along with a sense of urgency and immediacy. Duff provides three "ultimate criteria" for judging programs in applied linguistics: (1) satisfaction of the graduates, (2) graduates' ability to demonstrate/apply knowledge, and (3) graduates' ability to secure and retain appropriate professional positions upon completion of their studies. In a similar vein, Robinson proposes three performance measures for judging graduates of applied linguistics programs: (1) the ability to give papers at conferences, (2) the ability to get research published in refereed journals, and (3) the ability to teach applied linguistics classes at the university level.

With regard to curriculum, Lane argues for training in research design and statistics as well as for an introduction to applied linguistics, "which would survey as broadly as possible the disciplinary and interdisciplinary areas of applied linguistics." Turning away from specific courses or specific programs, Plough raises the need for graduate students to become autonomous learners when she notes, "For the benefit of our profession and for our own marketability, it is incumbent upon us to keep abreast of the advancements in those various disciplines which contribute to our field, even if our particular institutions do not offer specific courses in those areas." This is certainly a positive response to the local

limits and constraints of any particular program, which several of the panelists noted.

Smith appropriately reminds us that many applied linguists are indeed interested in how research might relate to or be applied in the second and foreign language classroom. If an applied linguist, when asked about the language teaching applications of his research says, "I am not interested in that," this is his or her own position. Fine. However, for such an individual to say "Applied linguists are just not interested in that" is certainly unwarranted given the importance of educational applications--and other types of applications--that most of the panelists and the graduate students have noted.

I am not as negative about this exchange of views as is Robinson, who I feel misrepresents some of the panelists--especially Schumann--on several counts. I want to point out the two most glaring misrepresentations of Schumann. First, Schumann's proposals do not limit entrance to the UCLA Ph.D. program to students who have completed M.A.s at UCLA; as a matter of fact, most UCLA Ph.D. students presently come from other institutions and represent a range of disciplines. Second, Schumann does not state that UCLA Ph.D. students take only one course in the department and do all other coursework in other departments; UCLA Ph.D. students simply have the freedom and flexibility to take courses in other departments if such courses best serve their research objectives. Each student's individual study plan is regularly negotiated and renegotiated with the student's faculty mentor.

Finally, I agree with Freeman, who concludes that "this dialogue between universities and among students and professors, represents what is necessary to push the field of applied linguistics forward. Collaboration across disciplines and across generations will bring new perspectives." Issues have been raised and points and counterpoints have been made which suggest that the AAAL panel and this special feature are merely the beginning of an extended dialogue about how to prepare applied linguists for the future. I thank John Schumann and the five responding panelists for their thoughtful statements, and I thank the six graduate students who gave us their perspectives on the panel's thoughts because, in some important sense, a program in applied linguistics is only as excellent as the graduate students it attracts and admits.

It is now appropriate to open this debate even further and to ask other applied linguists, both professors and graduate students, to identify problems and issues in the preparation of applied

linguists that were not brought to light in this special feature. To this end, the editors of *IAL* welcome responses for inclusion in future issues of the journal.

NOTES

¹ I should note, however, that I also benefitted enormously from a solid M.A.-level education in TESL/SLA at the University of Hawaii during the 1980's.

² Besides being pedagogically commendable, such a system would, in principle, take care of several past practical problems: (1) lack of space, funding, and equipment to support collaborative work in the department; (2) lack of high-level courses designed for advanced graduate students (also grounds for having students pursue advanced courses outside the department); and (3) a 10-week "quarter" system making it very difficult for individuals to complete substantive independent research projects in one term.

³ I am indebted to Russ Campbell of UCLA's Language Resource Program for this opportunity; other students have been able to get practical and research experience in language education programs in Mexico, China, Korea, and now Armenia (to name just a few countries) through this program.

⁴ Incidentally, Russ Campbell (personal communication) has never been in favor of scrapping productive research in the domain of language education, but rather suggests that research in (second or foreign) language education *not informed by* a sound knowledge of acquisition, assessment, and discourse may be weak in its theoretical underpinnings, design, and analysis, and therefore be of limited usefulness to the field. However, this does not mean that research in language education (yet undefined in this special feature) *necessarily arises from* a concentration in one or more of these three subdisciplines; it draws from, builds upon, and goes beyond them.

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John J. Staczek is Associate Professor of Linguistics and Acting Director of the Georgetown University Press. His research interests lie in syntactic variation, lexical variation, discourse analysis and variation, program administration, bilingualism, language planning, language maintenance, and language death.

REVIEWS

Learning, Keeping, and Using Language: Selected Papers from the 8th World Congress of Applied Linguistics, Sydney, 16-21 August, 1987 edited by M.A.K. Halliday, John Gibbons, and Howard Nicholas. Amsterdam/Philadelphia: John Benjamins, 1990. Vol. 1, xx + 508; Vol. 2, xv + 489.

Reviewed by
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The first part of this review is meant to give the reader an overview of the content and organization of the 55 papers selected by the editors to represent the 8th International AILA Congress in Sydney. The second part addresses five issues that are raised by this two-volume collection of papers:

- •How well does the collection represent the field of applied linguistics?
- •Which research paradigms and approaches are represented?
- •How many of the world's languages are represented?
- •How well does the collection represent the international community of applied linguists?
- •How accessible is the collection to non-specialists?

The 8th AILA Congress of the International Association of Applied Linguistics (AILA), held in August 1987, opened with an address by Dick Tucker and featured four other plenary speakers: Wilga Rivers, Michael Clyne, Braj Kachru, and Chris Candlin, all of whom contributed to the collection. The Congress as a whole had 23 sessions on 17 different topics in applied linguistics, which leads one to wonder how the editors selected the 55 papers that appear in the present collection.

In the foreword, the editors state that they decided to concentrate on three broad areas which had emerged as the dominant motifs of the Congress: (1) the learning and teaching of languages, both mother tongue and second or foreign languages; (2) language as institution, including language maintenance and loss,

and language policy and planning; (3) the nature and analysis of text, including register variation and the social construction of discourse. Their title, *Learning, Keeping, and Using Language*, reflects these three general motifs.

To tie the papers together, the editors provide not only a foreword but also an afterword and a brief introduction to each of the three sections. Volume 1 consists of the first section (Learning Language), while Volume 2 contains Sections 2 and 3 (Keeping Language & Using Language, respectively). Each volume has a table of contents plus a list of the contributors (with their institutional affiliations and addresses) to the entire two-volume collection, which is hard-covered and well bound.

For purposes of this review, I find it useful to depart from the editors' broad tripartite division, which perhaps reflects Halliday's penchant for three-way divisions. Instead, I offer my own narrower classification of the 55 papers, using eight categories which I believe are more useful and meaningful to most applied linguists: (1) discourse analysis; (2) literacy acquisition; (3) language pedagogy; (4) language acquisition; (5) language maintenance, shift, and attrition; (6) language policy and planning; (7) the nature and scope of applied linguistics; and (8) miscellaneous.

Of the 55 papers in this collection, 13 of them, or the largest proportion, represent discourse analysis and include topics as diverse as service encounters (Simounet de Geigel, Ventola), conversation (Auer et al., Murray), language and ideology (McGregor, Lemke), register variation (Adams-Smith), ellipsis in news headlines (Jenkins), and various types of text analysis (Ciliberti, Puglielli, van Stapele, Fries, Gunnarsson). The Ciliberti and Puglielli papers represent the macrotextual and microanalysis levels respectively of instructions written in Italian for using equipment of various kinds and as such form a set to be read together.

Eight papers focus on either L1 or L2 literacy acquisition, often with implications for teaching. The topics discussed include exploring the consequences of similarities and differences in oral and written language (Rado & Foster, Hammond), development of genre or register (Pappas, Ostiguy et al., Elliott), the development of cohesion in writing (Yde & Spoelders), learning to read in a second language (Wallace), and L2 orthography acquisition (Luelsdorff).

There are seven papers representing language pedagogy. Of these, three are methodological in thrust (Rivers, di Pietro, Gassin), and two deal with curriculum issues (Tickoo, Moore). The other

two involve specific techniques for teaching vocabulary: cloze (Carter) and computerized word analysis (Goethals et al.).

Another six papers deal with child language acquisition (both monolingual and bilingual/simultaneous). Three of these focus on the role of parents in the development of bilingualism (Comeau & Therrien, Hasan & Cloran, Doepke), while there is one paper each on the relationship of language and learning (Oldenburg), the role of transfer (Kwan-Terry), and artificial bilingualism (Saunders). By contrast, only three papers deal with adolescent or adult second language acquisition (White, Bolander, Borland).

Questions of maintenance, shift, and attrition in languages and dialects are addressed in five papers. Here it is worth mentioning the language or dialect involved in each study: Skibotn and Northern Norwegian (Bull), Krefeld German (Bister), Sydney Italian (Bettoni), Overseas Hindi (Siegel), and Torres Strait Creole (Shnukal).

Language policy and planning is the subject of four papers. Clyne examines Australia's language policy and its research implications. The papers by Bendor-Samuel and Walker both address aspects of vernacular literacy for languages with newly developed writing systems; they form a set and should be read together, much like the Ciliberti and Puglielli papers mentioned earlier. Finally, Gonzalez's report on bilingual education in the Philippines argues that evaluation must be an integral part of language planning.

Three papers address the nature and scope of applied linguistics from various perspectives. Tucker provides a disappointingly brief and incomplete overview (only 4 pages), Kachru looks at varieties of English around the world and the related challenges this diversity poses for applied linguistics, and Candlin argues that applied linguistics must become critical by applying language study to the amelioration of the human condition for individuals and for groups. The afterword by the editors also addresses the question of what applied linguistics is and acknowledges how difficult it is to define the field. Certainly, the second issue of this journal, which contained a special feature on this topic (*IAL*, 1990), provides a useful complement to the three papers and the afterword in these proceedings.

The six remaining contributions are scattered and less connected to the others and thus constitute a "miscellaneous" category. Two of these papers deal with the issue of regionalisms (or peripheral vocabulary) in language description and language teaching (Willemyns, Maire). Another two deal with

neurolinguistics: one attempts to redefine the field (McKellar), the other reports on a dichotic listening experiment with Mandarin-English bilinguals (Thomas & Gradman). Finally, the fifth paper examines professional vs. nonprofessional text translation (Tikkonen-Condit), and the sixth deals with varieties of English (Platt)--although one could argue that Kachru's paper covers this topic, too.

How well do these two volumes represent applied linguistics as a field which has accomplished interesting tasks and which is headed in productive and interesting directions? As the above survey of content reveals, many areas within applied linguistics are covered; however, language assessment/testing, a major area of research in applied linguistics, is totally absent from the collection, while other major areas of concern--such as second language acquisition, classroom research, literature, and language for specific purposes/content-based language teaching--are underrepresented. To be fair to the editors, however, they did not set out to represent the field as a whole but rather to reflect the main themes that emerged at the Congress. One would have to examine the Congress program, which I do not have at hand, to evaluate how successful they have been.

What research paradigms and approaches are represented in the collection? Given that Michael Halliday was one of the Congress organizers and also one of the editors of this collection, it is not surprising that of the 55 papers published, 18 of them draw either on his systemic model of functional grammar (Halliday, 1985) or his model of cohesion (Halliday & Hasan, 1976). This is certainly the dominant paradigm, though by no means the only one, represented in this collection. Furthermore, a majority of the papers are qualitative/observational rather than quantitative/experimental in approach. A better balance between the two research approaches would have been more representative of the field as a whole. Indeed, Candlin, in his closing plenary, calls for better integration of quantitative and qualitative methods in future applied linguistics research.

How representative of the world's languages are the papers? According to the foreword, the editors had intended the collection to be published in English and French; however, since only two of the 55 papers accepted for publication were submitted in French, the editors decided to translate the two French ones and publish the collection in English, an indication that English has become, de facto, the language of communication and publication in applied linguistics. Fortunately, this does not mean that standard English is

the only language taught, learned, used, or analyzed in the 55 papers; data from and/or speakers of the following languages are also represented in the research reported: standard or dialectal French, Italian, German, Swedish, Norwegian, Dutch (Flemish), Spanish, Finnish, Cantonese, Mandarin, Hindi, Pilipino (Tagalog), and Gooniyandi, an Aboriginal language. Likewise, the focus in some of the studies of several types of English--including creoles, regional varieties, and interlanguages produced by a variety of L1 speakers--also contributes to the linguistic diversity of the collection.

How representative of the international community of applied linguists is the collection? The 55 papers in the two volumes are written by 67 authors representing 16 countries, of which Australia and the United States are most heavily represented, with 18 and 15 contributors respectively. Outside of North America, Western Europe, and the host country, Australia, only three Pacific Rim countries are represented: New Zealand, Singapore, and the Philippines. This geographical imbalance leaves the reader with the impression that applied linguistics is largely a North American/Western European/Australian undertaking, yet we know that important research is being done in Africa, Latin America, South Asia, and the Middle East. Apparently these voices were not heard in Sydney (or were not selected to represent the Congress in print).

How accessible is the collection to non-specialists? Making this collection accessible was one of the stated objectives of the editors. Yet clearly the readers are expected to be familiar with terms and concepts representing a variety of research paradigms and methods used in linguistics and applied linguistics. Some of these specialized terms are, for example, Pearson's correlation test and ANOVA (from statistics); tenor, mode, and field (from systemic grammar); the subjacency principle and Pro-drop parameter (from Chomskyan linguistics). Non-specialist readers will thus need substantial background to comprehend many of the papers.

Despite these reservations, the collection is certainly important for historical reasons. It is a partial (yet nonetheless the most complete) published record of the 8th International AILA Congress. As such it should be in all libraries of institutions which train and service applied linguists. Individual researchers will want to read papers of interest to them, and clearly discourse analysts and child language/literacy development specialists are the two groups best served by the collection. I cannot conceive of either or both volumes being used as a textbook for a class; the papers are too diverse and too uneven. Selected papers will, however, provide

useful supplementary reading for applied linguistics courses dealing with a number of topics, such as language pedagogy, language policy/planning, literacy, child bilingualism, and languages/dialects in contact.

For future congresses, perhaps AILA should consider a policy that TESOL adopted several years ago: no longer to publish the proceedings of its annual conferences. Instead, individual members of TESOL are encouraged and assisted in editing smaller focused and thematic volumes whenever a particularly good related set of papers emerges from a given conference. The conference program with the abstracts of all the papers presented then becomes the official record of the conference, and those thematic volumes that are published contribute very positively to developing specific professional areas; they are potential texts and references for teacher/researcher training programs and for individual educators and researchers. Although this AILA Congress did produce a few thematic volumes, I believe the practice should have been extended to include most of the papers in this two-volume collection as well, and that the tradition of producing lengthy "proceedings," with many unrelated papers, should be abandoned.

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Multilingualism in India edited by Debi Prasanna Pattanayak. Clevedon, UK: Multilingual Matters, 1990. xii + 116 pp.

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> The choice of language and the use to which it is put is central to a people's definition of themselves in relation to their natural and social environment, indeed in relation to the entire universe.
>
> Ngugi Wa Thiong'o
> *Decolonizing the Mind*
> (1986, p. 4)

When India's first Prime Minister, Pandit Jawaharlal Nehru, characterized in glowing terms India's numerous languages and cultures as "unity in diversity," he was surely speaking in his colonial elitist voice, both literally as well as figuratively. Literally, Nehru was using his Oxford accent and register (as he did in his Independence Day Speech on August 15, 1947, "India's Tryst with Destiny"), acquired as a student of law at that famed university. Figuratively, he was hoping that the colonial ideology of patriotism, which he had also acquired in England, coupled with his own grandstand view of post-colonial Indian history, would carry the country through its immediate trauma. His view of a national culture, the "unity" of India, despite its 200-odd languages and cultures, was a gross simplification for the sake of political unity in its attempt to displace in the Indian psyche a pluralistic space bounded by different languages and cultures. Nevertheless, this imperialist representation served him well because it aimed to bring together a newly independent country which was, in Nandy's (1989) words, "not blessed with an authoritative cultural center" (p. 3) but with "mind-boggling amorphousness and diversity" (p. 4).

Pattanayak's introduction to his edited volume, *Multilingualism in India*, in contrast, argues that multilingualism is an asset, for the national culture that emerges from such a condition would have "an equilibrium [that] holds societies together" (p. viii). His rambling though passionate introduction sets the tone for the volume, especially his "anger at the subtle monolingual colonialism,

and anguish at the doubtful loyalty of the community groups in maintaining their languages and culture" (p. xi). He then works through the intricacies of reciprocal, transitional, monoliterate, partial, and full bilingualism in different countries and regions, including Wales, Scotland, South Africa, India, French-speaking Canada, and Spanish-speaking America.   He concludes his introduction with his key idea that "the assumption that variation is disintegration is unfortunate. Such an attitude equates different with deficient" (p. xii).

Unfortunately, although Pattanayak's introductory essay correctly asks for respect and understanding towards multilingual societies from monolingual ones, the volume (with the exception of two contributions by Ajit Mohanty and Jennifer Bayer) is not grounded in systematic empirical research on multilingualism and its effects on Indian societies. Instead it advocates multilingualism per se, as a panacea for problems related to higher education, tribal bilingualism, school education, literacy, and language planning. Moreover, most of the papers discuss fundamentally controversial matters, e.g., colonial and post-colonial language policy and the Indian government's national language policy, to name just two, in a simplistic and unproblematic manner.

Two examples should make the above point clear. The first is Krishnamurthi's narrative history of language education, from the early 19th century to the present, based on secondary sources (most of them official British records).   Throughout his article, Krishnamurthi comprehensively ignores recent subaltern studies of language planning and policy in colonial and post-colonial India which oppose imperialist representations and narrativizations of history (e.g., Cohn, 1981) as well as the spectacular work of a group of subaltern historians (Guha, 1985, 1988; Pandey, 1988; Spivak, 1988; Bhabha, 1990; Chakrabarty, 1992), whose main goal is to retrieve the subaltern consciousness in an "attempt to undo a massive historiographic metalepsis" (Spivak, 1988, p.13).

The second example of a too simplistic treatment of the complexity that is India's multilingualism is Srivastava's essay on multilingualism and school education, in which he argues for multilingualism with a fervor known only to fanatical religious leaders.   Srivastava states categorically that India "has always remained culturally and linguistically united while maintaining her linguistic diversity" (p. 40) and then goes on to argue that in Indian schools "there is a very high motivation for learning languages and that is what sustains them in the face of difficulties which are certainly beyond solution" (p. 46). Finally, he uncritically accepts

the Indian government's imposition of the the requirement that every school student in the country be proficient in three languages.

With regard to the high motivation in schools, Srivastava is blind to the more probable explanation that most students learn three languages in schools because they are forced to, not because they elect to do so. With respect to the implementation of the three-language regulation, Srivastava glosses over the fact that only two languages are taught in all north Indian states (Hindi and English), while only Tamil and English are required in the southern state of Tamil Nadu. In general, Srivastava's essay is likewise colored by political considerations: he says little about recent violent cultural and linguistic conflicts, for example, between Kokani and Marathi speakers in the state of Goa or between radical supporters of Kannada as the sole language of instruction (in line with the Gokak Commission Report) and moderates in the state of Karnataka, or about anti-Hindi attitudes in southern India. Srivastava seems to support, quite unproblematically, the hegemonic and elitist view which the Indian government professes in its national language policy. His views, rather like Nehru's, display the persistent older mode of the exercise of power in which ruling classes (British rulers, upper-caste members, or political zealots) typically exercised their domination by marginalizing and suppressing insurgency movements.

In sharp contrast to the multilingual paradise Srivastava presents, Mohanty, in his interesting essay on mother tongue maintenance, states that of the 1,652 mother tongues in India only 47 are used as media of instruction, 87 by the print media, and 71 for radio broadcasting. He quotes Khubchandani's (1986) candid view of the language situation in India:

> In spite of the linguistic reorganization of Indian states in 1956 based on the language identity of the dominant pressure groups, language identity regions are not necessarily homogenous communication regions . . . Every state, apart from the dominant state language, has from one to six outside, or minority languages which are spoken by more than 20 persons per 1,000 population. (p. 20)

Given this linguistic pluralism but lack of support for indigenous mother tongues (particularly for "scheduled" castes and tribes), Mohanty examines Kui, the language of the Konds, a small tribal group (population: 511,000, according to the Census of India, 1961) in the state of Orissa. Based on several studies of

monolingual and bilingual Konds, Mohanty reports that maintenance of Kui by the Konds is "a desirable goal for positive integration in a multicultural and multilingual pluralistic society" (p. 63).

However, Mohanty's suggestion would not receive enthusiastic support from the contemporary national political leadership whose consciousness, in Nandy's (1989) words, "aggregates interests and subnational cultures" (p. 7) and takes "a more imperial and instrumental approach toward the peripheries [for example, minority languages like Kui] and views the center [the central government] as the ultimate repository of the principle of the civilization" (p. 7). This is especially true given the feudal and bourgeois modes of power that control a politically uncentralized society like the Konds who have to live in the shadow of Oriyan physical and capitalistic domination.

Other articles in the volume worthy of mention include Bayer's empirical study of language and social identity among Tamil speakers in Bangalore (the capital of the state of Karnataka where Kannada is the dominant language), Dua's reflective essay on multilingualism and language planning, and Annamalai's descriptive study of tribal bilingualism using demographic information. However, even these studies are ultimately disappointing because they are too academic in nature and so far removed from both the political and social arenas that they would be trenchantly criticized by commentators from those perspectives.

Unlike the authors in this volume, Nandy and the subaltern language policy historians (e.g, Cohn, 1985) and educational theorists (e.g., Giroux, 1992) pay close attention to language politics because language politics is an integral part of Indian politics, and that is the perspective which is chiefly missing from this volume. The emerging culture of any state needs to be understood and integrated into discussions of language planning and policy so that readers might better understand how an otherwise secular tolerant country could be turned into a hegemonic fanatical nation-state. It is unfortunate that this volume lacks a conceptual framework (and, as a result, coherence) which could have bound the papers together; instead it loosely argues a case for multilingualism that finds its way into every paper without sufficient discussion from all relevant perspectives. Future authors might find it more promising to incorporate cultural and language politics into discussions of language planning and policy. As Giroux argues, citing C. Mohanty (1989-90), "questions about education cannot be reduced to disciplinary parameters, but must include issues of

power, history, self-identity, and the possibility of collective agency and struggle" (p. 73).

For now, Indian multilingualism is doing just fine without having acquired the Tower of Babel syndrome which Western monolingual enthusiasts such as Pool (1972) have predicted. Multilingualism will also continue to flourish because it was guaranteed by the authors of the Indian constitution (e.g., Dr. Ambedkar). It was they who wrote in 1948 that all the major regional languages of India, including English and Hindi, are official languages, a position which reflects the spirit of Thiong'o (1986). However, if neo-colonial and right-wing political zealots work their way into the Indian political arena, as has often happened in the last two years, Hindi could be declared the sole official language, with English and the major and minor Indian languages relegated to the status of local languages--transforming India from its astounding heterogeneity and contradictions into a neo-colonial homogenous modern nation-state with "unity" but without "diversity." It is in just this political context, which could potentially come to pass in the event of social and political instability, that Nehru's flawed idealism, Pattanayak's passionate argument, and Thiong'o's post-colonial vision for a truly multilingual nation-state should be welcomed.

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Full-length articles: Authors should embed their reports of research in an explicit discussion of at least one issue in applied linguistics. Manuscripts should be no longer than 30 double-spaced pages, including tables which must appear in their proper place in the text. The author's name should appear on a separate page only, along with a 50-word biostatement; the cover page should include a title and a 200-word abstract. Submit four copies to the Editor.

Book reviews: While book reviews are normally commissioned by *IAL*, readers may submit reviews of publications and materials relevant to the field of applied linguistics. The Editors prefer reviews which are embedded in a discussion of an issue in the field. Book reviews should not exceed five double-spaced pages. Reviews should be submitted in four copies, with full information on the material reviewed and a 50-word biostatement, to the Review Editor.

Special Features / Special Issues: *IAL* solicits proposals for special features, such as interviews and roundtables, and for entire special issues. All such proposals should include the participation of graduate students as organizers and contributors. Proposals for special features and special issues should be submitted in four copies to the Editor.

Work in progress: Short reports of work in progress in any area relevant to the field are encouraged. Manuscripts should summarize the work in an accessible manner, should provide supporting evidence for any claims made, and should be embedded in a short discussion of at least one issue in the field. Short reports of work in progress should be approximately five double-spaced pages, including references and endnotes, and should be submitted in four copies with a 50-word biostatement to the Editor.

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All submissions should be accompanied by all authors' full names, affiliations, mailing addresses, telephone numbers, and electronic mail addresses or facsimile numbers.

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